THE QUÉBEC MANUFACTURING AND TRADE SECTORS IN 1989

Québec

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Ministère de l'Industrie, du Commerce
et de la Technologie
Direction générale de l'analyse
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HIGHLIGHTS

HIGHLIGHTS

THE QUÉBEC MANUFACTURING SECTOR

■ In 1989, Québec recorded its seventh consecutive year of economic growth. An upsurge in investment, a significant number of new jobs and brisk exports made the manufacturing sector the driving force in Québec's economic growth, as w[illegible] the case the preceding year.

■ Output in the Québec manufacturing sector grew steadily in 1989, although less markedly so than in 1988, because of a downturn in personal consumer spending. Lower capacity utilization rates were accompanied by the relaxation of inflationary trends on the industrial price index.

■ Manufacturers' shipments increased by 3.9% in 1989, according to figures for the first nine months of the year, down from 8.9% and 8.2% in 1987 and 1988, respectively, but higher than that in Ontario (2.6%). Durable goods industries were largely responsible for such growth in Québec. Shipments over the entire year totalled $75 billion. The upturn in inventories which began in 1988 became more pronounced in 1989, and does not point toward a sustained revival in output in 1990.

■ In the wake of its remarkable performance in 1988, the Québec manufacturing sector created 18 500 jobs in 1989, a 3% increase, especially in the durable goods sector. In two years, 71 000 manufacturing jobs were thus created, accounting for more than 60% of all new jobs in Québec. In this respect, Québec outpaced Ontario, where manufacturing employment has stagnated since 1987. At the same time, wages have continued to rise in Québec: average hourly earnings in manufacturing rose by 3.7% in 1987 and 6% in 1989.

■ For the second consecutive year, Québec exports displayed remarkable vigour in 1989 (up 10.3% in the first six months of the year), paralleling performance in 1988. This achievement is all the more striking given that, in Canada as a whole, the unwavering strength of the Canadian dollar and the economic slowdown in the United States resulted in negligible increases in exports (0.1%), which actually declined slightly in Ontario. The situation is attributable in part to the automobile industry. Shipments of eight of the ten principal Québec products exported increased, markedly so in most instances.

■ Québec exports to the United States were up 7.6%, while exports from Canada as a whole stagnated. Attempts to diversify Québec exports met with success. Exports to the EEC rose spectacularly by 25 percent.

■ The average capacity utilization rate reached 82.2% in the second half of 1989 (Canadian figures). The downturn affected most of the main industry groups, with the notable exception of rubber products. Four groups operated at nearly full capacity: primary textiles, primary metals, electrical and electronic products, and chemical products.

■ In 1989, investment in the Québec manufacturing sector was exceptionally brisk despite a downturn announced in the second half of the year. According to mid-year Statistics Canada forecasts, capital spending was up 38%. The Québec/Ontario capital spending ratio reached 70%, compared with an annual average of only 43.4% between 1979 and 1982. Québec manufacturers have not enjoyed such vigorous growth in investment since 1980.

■ The most striking upsurges in capital spending were noted with respect to non-metallic mineral products (126%), petroleum and coal products (99%), primary metals (72%), and the paper industry (65%). In 1989, the latter two industry groups accounted for 70% of growth in capital spending in the Québec manufacturing sector. Over two years (1988-1989), 17 sectors out of 20 experienced growth, which surpassed 50% in eight of them.

■ Research and development expenditures in Québec's manufacturing sector totalled $770 million in 1987 (the last year for which statistics are available) and could exceed $900 million in 1989. The transportation equipment, electrical and electronic products, and chemical products industries continue to account for over 75% of R & D expenditures in manufacturing. The overall growth rate of R & D in Québec surpassed the Canadian rate.

■ Despite vigorous investment in the manufacturing sector, the penetration of new production automation and computerization technologies is still limited in Québec, although it does compare favourably with the situation in Canada as a whole. A recent Statistics Canada survey reveals that 54% of Québec manufacturing plants use at least one leading-edge technology, thus ranking the province first in Canada in terms of the use of such technologies. The electrical and electronic products and transportation equipment industries make the greatest use of these new technologies.

■ A recent survey reveals that eight industry groups plan to invest over $2.3 billion on new technologies in the next five years, thus emphasizing Québec's vitality in this field.

■ For the first time since 1982, Canadian manufacturers posted a 10% decrease in basic earnings (data for the first nine months of 1989), largely attributable to the situation in the pulp and paper industry.

■ The number of business bankruptcies in the manufacturing sector rose in 1989, once again highlighting the sector's greater cyclical sensitivity in Québec.

■ Since 1987, the number of person-days lost in work stoppages has declined steadily in the Québec manufacturing sector. Recent economic expansion and prosperity in the sector have resulted in more widespread wage increases rather than in systematic confrontation during collective bargaining.

THE TRADE SECTOR IN QUÉBEC

■ In the wake of brisk sales in 1988, the Québec wholesale trade sector recorded a 0.5% increase in sales in 1989 (data for the first eight months of the year). A significant decline in wholesalers' inventories reflects widely anticipated cooling of the economy.

■ Retail sales kept decelerating in 1989, when they rose by only 2.3% (data for the first nine months of the year), the lowest increase since 1982. This situation is largely attributable to curtailed spending among consumers, who are heavily in debt and subject to the high interest rates adopted pursuant to the Bank of Canada's restrictive policies.

■ For the first time since 1982, sales of durable goods declined, dropping by 1.4% (data for the first nine months of the year), due mainly to a marked downturn in automobile sales. While growth in sales of semi-durable goods was fairly stable (5.9%), the 2% increase in sales of non-durable goods was the lowest in the decade.

■ The number of jobs in the Québec trade sector rose by a striking 13.9% in 1989 (data for the first eleven months of the year), mainly because of widespread hiring in the wholesale trade sector. All told, 26 000 jobs were created in the trade sector; inflationary pressures on wages failed to materialize.

■ Investment in the sector continued apace. The vitality of department stores and wholesale outlets resulted in a 12.3% increase in capital spending, according to Statistics Canada mid-year forecasts.

SECTORIAL REVIEW

■ Shipments in the machinery, transportation equipment, and electrical and electronic products industries were up more than 10%, although these industries were not responsible for the most robust growth in capital spending. In this

regard, the pulp and paper, primary metals, non-metallic mineral products and petroleum products industries took the lead. The aluminum, copper, wood pulp, automobile, telecommunications equipment and aircraft engine industries ranked first in terms of exports.

REGIONAL OVERVIEW

■ In 1989, employment in the Laurentides and Lanaudière regions rose by 5.5% (data for the first eleven months of the year), and outstripped performance in Québec as a whole for the second consecutive year. Growth in employment in the Montérégie region was also remarkable, all the more so in that it accounted for more than half of new jobs in Québec in 1989. On average, job creation in the other regions kept proceeding at a somewhat reduced rate by the end of the year.

■ Unemployment rates in the regions were fairly stable in 1989, more than half of them remained above 10%, though.

■ Most regions of Québec benefited from vigorous investment in 1989. The upturn in capital spending in the manufacturing sector was most pronounced in the Mauricie/Bois-Francs (28.1%), Saguenay/Lac-Saint-Jean (13.8%) and Montérégie (12.4%) regions.

THE GLOBAL ECONOMIC CONTEXT

THE GLOBAL ECONOMIC CONTEXT

THE INTERNATIONAL ECONOMIC SITUATION

In 1989, the seventh consecutive year of uninterrupted international economic growth, the GDP of member countries of the OECD increased by 3.6%; although such growth was slow, it was stronger than experts had predicted. This rate should drop to 2.9% in 1990, especially because of the sluggish American economy.

An appreciable reduction in unused production capacity in the manufacturing sector of OECD countries, combined with striking increases in the cost of food and energy, spurred recent inflationary trends. The inflation rate, as indicated by private consumption deflators, rose from 3.3% in 1988 to 4.4% in 1989. Inflation could level off at the same figure in 1990.

Employment increased in 1989 by an average of 1.7%; as was the case in 1988, the upturn was most pronounced in North America. Unemployment has abated constantly since it reached a peak in 1983. The average rate in 1989, 6.6%, is the lowest in eight years. The economic slowdown forecast for 1990 should result in a curtailment of new jobs, particularly in Europe. The average growth in employment in 1990 could drop to nearly 1%, a 15-year low, with no accompanying increase in unemployment.

In light of the international economic slowdown, the increase in average wages should reach around 5.9% next year. Such increases should be markedly higher in Great Britain, and appreciably smaller in Europe. Ongoing structural reforms designed to enhance the flexibility of labour markets should result in higher productivity.

Little progress is anticipated in rectifying the balance of payments. A strong dollar and rising oil prices, among other things, have led OECD forecasters to predict in 1990 a slowdown in the reduction in the imbalance of payments between the main industrialized nations. In particular, it would appear that the current U.S. trade deficit will stabilize, while the trade surpluses of Japan and West Germany will rise slightly. Moreover, it would seem that imbalances between EEC countries will widen.

In many countries, the need to curb renewed inflationary pressures and halt the deterioration of the current account should nudge interest rates upwards during most of 1990.

However, in 1989, the higher short-term interest rates noted earlier did not lead to higher long-term rates; the yield curve levelled off, which suggests optimism on financial markets regarding inflation in the months ahead.

The buoyant Japanese economy ranked first in 1989 among the seven major industrial powers with respect to growth: the country's GDP rose by 4.8% in real terms. Sustained domestic demand slowed somewhat, to 5.6%. Private consumption and non-residential investment should continue to spur growth in 1990, because of Japan's expansionist economic policies. Insufficient domestic supply and Japan's growing integration with the newly industrialized countries of Asia suggest an upsurge in the volume of imports. However, the recent slide in the value of the yen, should it persist, could affect trade and reverse the process of external adjustment. Japan's trade surpluses are expected to reach $69 billion by the end of 1991, slightly higher than the 1989 figure. According to OECD data, inflation in Japan hovered around 1.7% in 1989. In 1990, the 3% value added tax and low unemployment will produce inflationary pressures. The inflation rate, as indicated by private consumption deflators, should reach 2.7%.

Production, investment and employment have risen slowly in several large EEC countries, as a result of restrictive domestic economic policies. Real GDP growth in the EEC dropped from 3.5% in 1988 to 2.8% in 1989, although this slowdown should not hinder increased investment, engendered by the impending integration of the European market in late 1992. Rapidly changing events in Eastern Europe could also have a positive effect in this respect. Growth in private non-residential investment should remain firm; its average rate in 1989-1990 should reach between 6% and 7%. Ongoing tax reforms will reduce price distortions on markets and bolster their economic efficiency.

THE ECONOMIC SITUATION IN THE UNITED STATES

In the United States, 1989 marked the seventh consecutive year of growth. Although such growth was sufficiently sustained to preclude a recession, it lagged over the preceding years. Gradual tightening of U.S. monetary policies, initiated over a year ago, has begun to have an effect.

Confronted with accelerating inflation, which rose from 3.9% in 1988 to 4.5% in 1989, the Federal Reserve System did not alter its policies. Its primary objective is to eliminate inflationary pressures within five years. The task is not an easy one, given the increasingly obvious capacity constraints in the manufacturing sector, and growing labour costs spawned by a shrinking labour market. In April 1990, the hourly minimum wage will climb from US$3.35 to US$3.80, which will help nudge the inflation rate, as indicated by private consumption deflators, to 4.7% in 1990, despite the economic slowdown. Under the circumstances, the Federal Reserve System will keep a close eye on monetary policy in the coming months. In the short term, the economic cost of such a policy will be reflected in sluggish demand, followed by a drop in output and price reductions.

The economic downturn appears to be less pronounced than predicted in 1989. Growth in the U.S. GDP for the entire year should reach 3%, compared with 4.4% in 1988; during the third quarter of 1989, it was up 2.9% over the same period in 1988.

Expansion in 1990 will be more modest: the annual increase in the GDP should be around 2%, at the lower limit of the country's normal long-term growth potential. Recent changes in the index of leading indicators, a forerunner of economic trends over the next six to nine months, suggest continued sluggish growth. Changes in the index do not foretell a recession, at least in the near future.

There are many signs of a slowdown: slight decreases in the number of building permits and in new orders placed with manufacturers for consumer goods, fluctuating share prices, faster delivery times, a shorter average work week, and higher unemployment insurance claims. Public spending has been curtailed through attempts to control the federal deficit. Equipment orders and the prices of industrial materials are up, however; these are traditional signs of the tail-end of periods of expansion.

The overall economic slowdown has affected the manufacturing sector: for the first three quarters of 1989, the Purchasing Managers Index, based on a survey of the purchasing agents of the biggest U.S. industrial firms, has remained more or less consistently below the zero growth threshold. This confirms a reduction in manufacturing activity in the U.S. Lacklustre retail sales and a sharp drop in industrial output have resulted in smaller net operating profits, despite higher productivity. Dwindling profits have adversely affected the labour market.

Employment increased by 2% in 1989, compared with 2.3% in 1988, the lowest figure since 1982. The unemployment rate will rise by one-fifth of a percentage point in 1990, in relation to 1989, and should remain near 5.5%, the 1988 figure.

Sluggish job creation expected in 1990 will not generate sufficient household income to revive consumption and housing starts, which were anemic in late 1989. However, wealth could, to a certain extent, play this role in 1990. Falling interest rates on the bond market and the attendant

rise in share prices enhance household wealth and spur consumption.

Business investment is not expected to increase significantly, because of stagnating profits, although it will remain the most vital component of domestic demand. In particular, a marked improvement in the international competitiveness of U.S. manufacturing industries and the replacement of aging equipment contributed to a striking increase in capital spending by manufacturers. Expenditures for new plant and equipment continued to rise in 1989, reaching 10%, even after a 10.5% growth in 1988.

Exports were handicapped by the appreciation of the dollar, and will gradually decline as the U.S.'s trading partners experience a more pronounced economic slowdown. Continued slow economic growth in North America will curb imports. It is therefore likely that U.S. foreign trade will stabilize rather than improve.

THE ECONOMIC SITUATION IN CANADA

In 1989, Canada avoided a recession while progressing through the culmination of an economic cycle, characterized by a tightening of unused production capacity, vigorous business investment, and rising inflation, fuelled, among other things, by the tax burden and high interest rates.

Since the beginning of the year, economic growth has been very modest. Between September 1988 and September 1989, real GDP grew by roughly 2.8%, compared with 4.8% in 1988. This trend should continue in the coming months; OECD forecasters predict a general economic downturn in 1990. GDP should rise 2%, similar to the U.S. rate. Many factors explain Canada's sluggish economic performance. Among the most frequently cited are the culmination of a very long expansion cycle, high interest rates and flagging economic activity among Canada's main trading partners, especially the United States.

Only investment remained vigorous. Despite the steady rise in interest rates, capital spending was particularly brisk in 1989. Canadian businesses sought to increase production capacity and enhance their competitiveness, partly in anticipation of new business opportunities arising from the implementation of the Free Trade Agreement. The firms continued to invest in factories and equipment, especially in Québec: capital spending in Canada as a whole was up 11.1% in 1989, compared with 12.8% the preceding year. Investment offset consumption at the culminating point of an economic cycle.

Capital spending figures suggested a downturn, starting in the summer. The significant drop in imports of machinery and equipment at the end of the year pointed to reduced investment in 1990. The business community, whose confidence is dwindling, expects economic conditions to deteriorate in the near future. Stiffer competition from major world producers, especially Europe and Japan, could spur Canadian manufacturers to invest, though.

Rising interest rates have already dampened other components of domestic demand: consumer spending and housing starts, in particular, declined in 1989. Retail sales slowed down in 1989 because of heavy consumer debt. The first phase of the federal tax reform led to an increase in real individual disposable income, although the effects of the reform softened off out mid-year. Consumer spending only rose by 5.3% during the first three quarters of 1989, compared with 8% in 1988. Sales of durable goods experienced the sharpest decline. Forecasters do not expect sales of consumer goods to grow in 1990. Heavy consumer debt will encourage households to improve their financial position through higher savings, currently at very low levels. However, in late 1990, consumers will undoubtedly make some purchases earlier than expected to avoid the new federal goods and services tax.

During the first nine months of 1989, housing construction fell by 3.3%; the decrease occurred in all of the provinces except Newfoundland, Alberta and British Columbia. High interest rates and house prices will continue to curb housing starts in the coming months, although new construction could increase in late 1990 on the eve of the introduction of the GST.

New orders for manufactured goods rose a scant 0.2% between the first nine months of 1989 and of 1988 (in constant dollars, they fell by 2.5%). While manufacturers' shipments totalled $223 billion during the first three quarters of 1989, a 3.3% increase over 1988, the growth rate is only about a third of what it was the preceding year. Inventories of finished Canadian products rose significantly during the year, another sign of a slowdown, and a direct consequence of sluggish sales of durable goods.

External trade also dampened economic activity. During most of 1989, the strong appreciation of the Canadian dollar undermined the competitiveness of exports. The current account balance declined markedly: the deficit climbed from $3.9 billion in the first half of 1988 to $9.3 billion in 1989. The size of the anticipated year-end deficit is worrisome because of Canada's outstanding international debt. The upsurge in the current account deficit is attributable to a sharp deterioration in the balance for invisibles (due in particular to interest income paid abroad), combined with a reduction in the trade surplus. The merchandise trade balance recorded a modest $868 million surplus by mid-

1989, a drop of more than $2 billion over the first half of 1988. It should be noted that, for several years, machinery and equipment purchased in Canada have been largely imported, and the trend is growing. Brisker imports in this category in 1989 combined with an investment boom explain by and large the deterioration in the trade surplus.

According to a Statistics Canada labour force survey, employment increased by only 2% in 1989 (data for the first eleven months of the year), compared with 3.3% in 1988. Canada's performance in this regard, similar to that of the United States, ranked the country first among the seven major industrial nations in the OECD. Seasonally adjusted unemployment figures hovered between 7.3% and 7.8%, below the 1988 rate but for one minor exception; the average drop in the unemployment rate was 0.25%.

The Canadian consumer price index rose 4.9% during the first ten months of 1989, compared with 4% in 1988. The trend toward lower prices for basic goods and lagging consumption are likely to attenuate inflationary pressures in the coming months. In 1990 overall, the consumer price index could level off at 4.8%, the 1989 figure.

As inflationary pressures subside and the economy continues to slow down, the Bank of Canada may well relax its monetary policy by lowering interest rates, to head off a recession. The relaxation of interest rates will be slow, gradual and predicated on a downturn in economic growth. Discrepancies in short-term interest rates in Canada and the United States will be pronounced for most of 1990, especially if growth in consumer credit is maintained. The Canadian dollar should remain strong, thereby exacerbating the current account deficit. Should the Bank of Canada fail to relax interest rates, the risk of a recession in 1990 cannot be dismissed, for example, were the Bank of Canada to maintain a restrictive monetary policy to quash any attempt to offset through wage increases purchasing power lost through the federal goods and services tax.

THE MANUFACTURING SECTOR

THE MANUFACTURING SECTOR

INDUSTRIAL PRICES

Growth in Canadian industrial prices slowed appreciably in the first nine months of 1989, reaching 2.7%. In 1988, the growth rate fell constantly from month to month, a trend which persisted and amplified in 1989. If the trend continues, the rate should reach 2.5% for the entire year. Such a rate in the industrial sector would dampen an increase in the consumer price index. Plastics products (because of the price of inputs), paper (newsprint and other printing papers), primary metals (lower aluminum, copper and nickel prices), and chemical products (price of resins) contributed significantly to this shift. All of these groups, each because of its particular circumstances, pushed up industrial prices in 1988. It should be noted that the selling prices of petroleum and coal products increased for the first time since 1985.

PRODUCTION

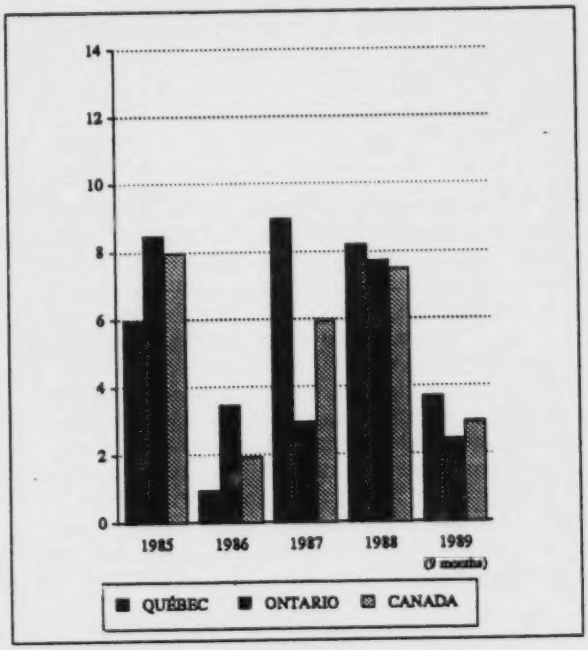
Québec manufacturers' shipments climbed by slightly more than 4% in 1989, a slowdown in the wake of the upsurge recorded in 1987 and 1988. Growth in inventories, which began in 1988, amplified in 1989, and does not point toward a sustained revival in production in 1990. However, for the second consecutive year, Québec exports were remarkably brisk in 1989; the achievement is all the more noteworthy given that in Canada as a whole, the unwavering strength of the Canadian dollar meant that the increase in exports was negligible.

SHIPMENTS

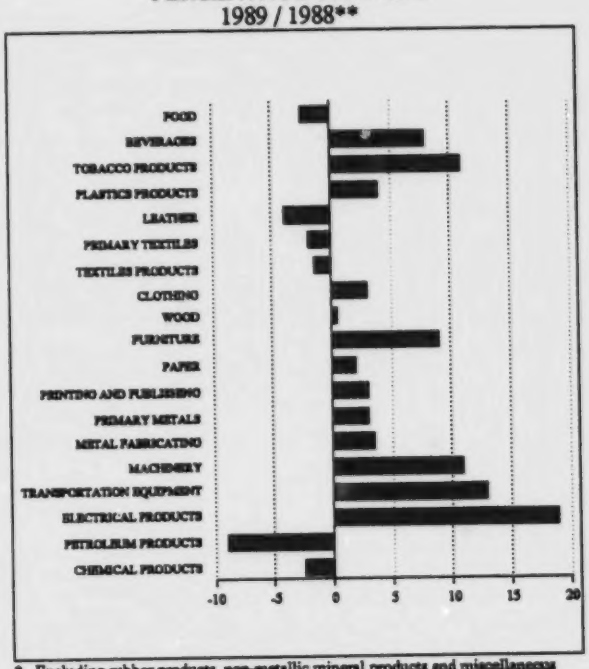
Growth in Québec manufacturers' shipments during the first nine months of 1989 compared with the same period in 1988 reached 3.9% (or 1.1% in constant dollars), against 8.2% in 1988. The annual growth rate thus declined for the second consecutive year. Vigorous industrial output growth gradually waned as consumption declined and economic expansion slowed down.

For the third consecutive year, growth in Québec manufacturers' shipments outstripped that of their Ontario counterparts (2.6%); indeed, output in the neighbouring

MANUFACTURERS' SHIPMENTS
QUÉBEC, ONTARIO, CANADA
ANNUAL PERCENTAGE CHANGES



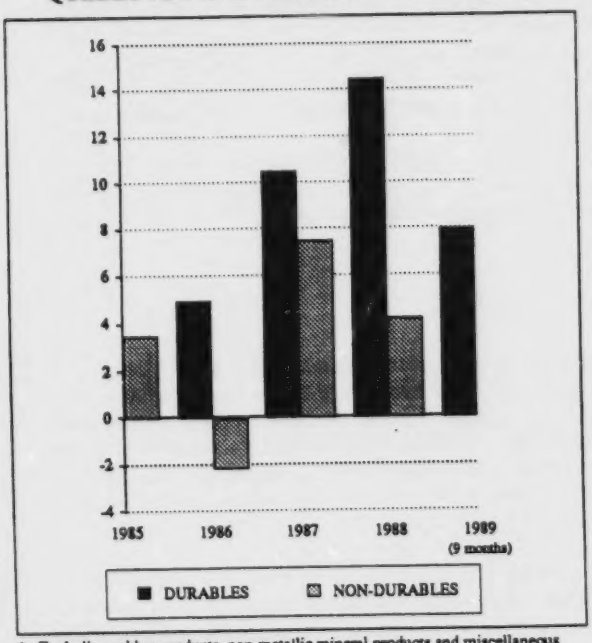
MANUFACTURERS' SHIPMENTS*
QUÉBEC
PERCENTAGE CHANGES
1989 / 1988**



* Excluding rubber products, non-metallic mineral products and miscellaneous manufacturing, for which the data are confidential.

** First nine months.

MANUFACTURERS' SHIPMENTS
DURABLE* AND NON-DURABLE GOODS*
QUÉBEC ANNUAL PERCENTAGE CHANGES



* Excluding rubber products, non-metallic mineral products and miscellaneous manufacturing, for which the data are confidential.

province fell by 0.2% in constant dollars. Toward the end of the year, shipments slowly picked up again, which suggests that performance throughout 1989 was somewhat firmer. The situation in Ontario is considerably different from that prevailing in Québec: the production of durable goods has not grown as markedly and only slightly exceeded the growth rate of shipments of non-durable goods.

The production of durable goods increased again in Québec in 1989, by 8.1%, compared with 1% for non-durable goods. This shows that, at the end of an economic growth cycle, the Québec economy is fuelled by the capital spending of businesses. Growth recorded by capital goods producing sectors such as the machinery, transportation equipment and electrical and electronic products industries is indeed remarkable; it ranged from 10% to 20%. On the other hand, the textile industry (a drop of nearly 2%) and the petroleum and coal products industry (a decline of nearly 10%) displayed the poorest performance. Overall, growth in shipments of non-durable goods was the lowest in the past three years.

Several factors dampened growth in shipments during the final months of 1989. Higher inventories, the economic

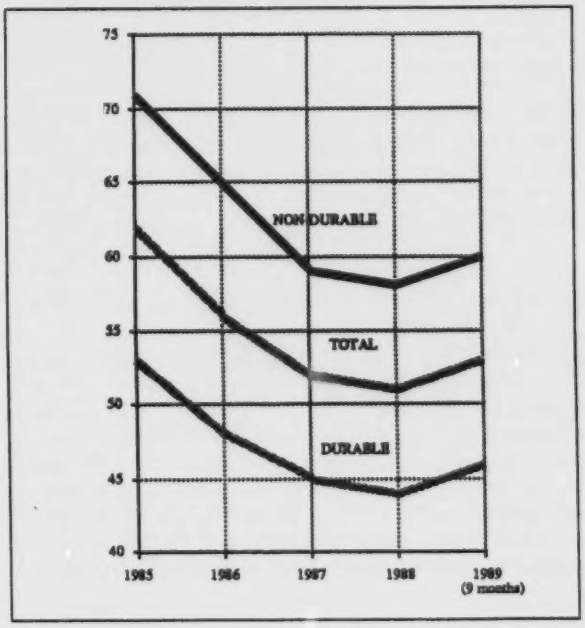
situation of the biggest industry groups and, of course, the general economic slowdown kept estimated growth in shipments to 3.4% in 1989; all shipments totalled $74.3 billion. In 1990, the growth rate of shipments should decline further. The anticipated curtailment of exports, surplus production capacity in a number of sectors, especially paper, and sluggish demand (for example in the automobile industry) should keep the growth rate in shipments at roughly 3% in 1990.

INVENTORIES

Inventories of finished products in the Canadian manufacturing sector were up 5.6% in the first nine months of 1989 over the same period in 1988, and 5.7% for 1988 overall. However, given slower rises in industrial prices, inventories expressed in constant dollars climbed 2.8% in 1989, compared with 1.4% in 1988. The trend to burgeoning inventories which began the year before became more pronounced.

Unlike the situation in 1988, which reflected normal inventory build-up after two years of depletion, the current upturn seems to indicate softer demand, thus compelling manufacturers to maintain inventories of finished products. The inventory-to-shipments ratio confirms this trend: having fallen constantly since 1983, the ratio then rose appreciably in 1989. This suggests that manufacturers had not yet fully tailored production to lagging demand; the adjustment must eventually be made, especially as demand continued to fall on Québec's domestic and export markets.

INVENTORIES OF
FINISHED PRODUCTS / SHIPMENTS
DURABLE AND NON-DURABLE GOODS
CANADA (PERCENTAGE)



Ratios in the durable and non-durable goods sectors have followed a similar course. In the case of durable goods, inventories were up 6.5%, but shipments increased even more sharply. Inventories of non-durable goods climbed by 4.9%, although growth rates in both sectors became more closely aligned . The inventory-to-shipments ratio rose markedly in the leather, textile products, paper, primary metals and machinery industries while, for at least two years, it dropped in the transportation equipment and electrical and electronic products industries.

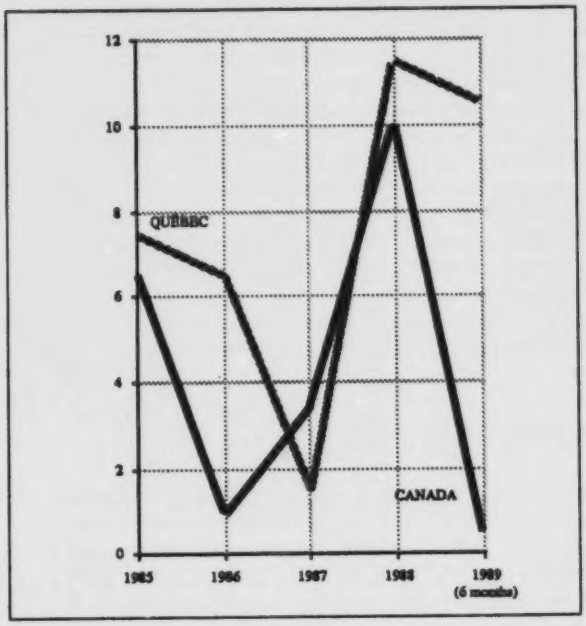
EXPORTS

For the first half of 1989, international exports loaded in Québec totalled $11.945 billion, a striking 10.3% increase over the same period in 1988; for two consecutive years the increase exceeded 10%. While marked growth in 1988 called for certain reservations, e.g. the introduction of a new international commodity designation and codification system, and the resumption of automobile exports, the change in 1989 underscores the vitality of Québec exports, despite the strong appreciation of the Canadian dollar in relation to the U.S. dollar over the past two years. International imports cleared in Québec increased by 8.4%.

Québec exports were markedly brisker than those in Canada as whole, where international exports posted a 0.1% gain over the same period, because of differences in the trade relations Québec and Canada maintain with their principal partner, the United States. Québec's exports to the U.S. were up 7.6%, while Canada's exports stagnated. An analysis of the makeup of Canadian exports south of the border reveals that automobile and chassis sales are largely responsible for Canada's lacklustre performance. Canada reduced its exports by more than 9%; Québec increased its exports by 31%, largely because of Hyundai's output in Bromont. The rest of Canada was also more greatly affected by sluggish softwood lumber sales.

Shipments of Québec's foremost export commodity, newsprint, declined by 10.2%, due to the appreciation of the Canadian dollar and reduced demand for paper in the United States. Based on data for the first six months of 1989 and given current market conditions, aluminum and aluminum alloys could overtake newsprint as Québec's leading export. Aluminum exports have risen sharply over the past four years. Widespread investment in this sector should sustain the trend in the coming years; Québec will soon account for 14% of worldwide production of the metal.

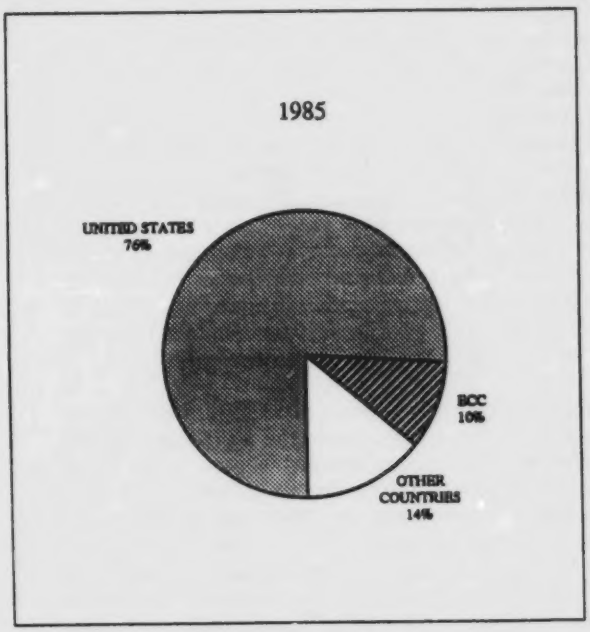
INTERNATIONAL EXPORTS
QUÉBEC AND CANADA
ANNUAL PERCENTAGE CHANGES

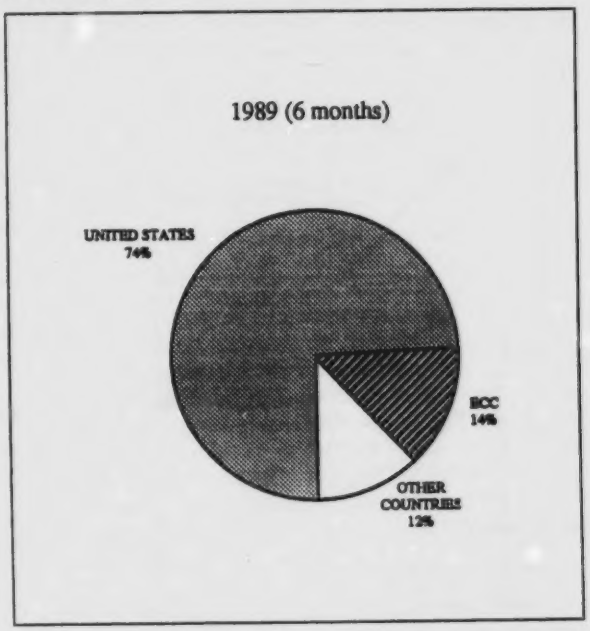


An analysis of the 10 leading export products (in descending order of importance) reveals that the drop in newsprint shipments is an exception; eight of the 10 products have recorded increases, for the most part striking ones. Shipments of aluminum and its alloys jumped 17.9% because of strong demand, favourable prices and new production capacity (ABI in Bécancour and expansion at the Reynolds plant in Baie-Comeau). Production at the Hyundai plant in Bromont and strong demand for GM cars manufactured in Boisbriand helped boost automobile and chassis exports by 27%. Exports of other equipment and telecommunications equipment (which includes all such equipment except television sets and radios) rose 25.1%. In this sector, years of growth and stagnation alternate. After a sluggish year, exports of aircraft engines and parts jumped by 45.2%.

Exports of the following five products were also brisk. Wood pulp exports recorded a 36.7% gain in the first six months of the year, the fourth consecutive year in which export growth in the industry has exceeded 20%. Lumber exports were up 8.2%, a striking revival after two years of sluggish sales. It would seem that producers are regaining some of the ground lost in the wake of the export tax, increases in cutting rights, and a downturn in construction in the United States. Office machine and equipment exports skyrocketed by 160% over two years, and posted a robust 25% gain in 1989, attributable to a spectacular

DESTINATIONS OF INTERNATIONAL EXPORTS LOADED IN QUÉBEC
UNITED STATES, EEC, OTHER COUNTRIES
PERCENTAGE DISTRIBUTION





upsurge in shipments to Holland resulting from the production mandate Phillips granted its subsidiary Micom. Exports of copper and its alloys have been growing steadily since 1986; their rate of growth reached an all-time high of 34.1% in 1989. Stronger demand from a number of European countries offset a slight downturn in sales on the U.S. market. The upswing in the value of exports was due to significantly higher copper prices. Exports of entire aircraft with engines continued to fluctuate; they fell by 12.7% in the first six months of 1989.

Exports loaded in Québec and destined for the United States totalled $8.814 billion in the first half of 1989, a 7.6% increase over the same period in 1988. Stronger exports to Europe meant that, for the third consecutive year, the relative share of Québec exports to the U.S. declined. In the first six months of 1989, 73.8% of Québec exports were shipped south of the border, compared with 75.3% in 1988.

The CEE is Québec's second most imporant export customer. In the first six months of 1989, shipments to this destination jumped a remarkable 25.5%, thereby confirming the EEC's growing importance as a trading partner (its share of Québec exports rose from 10% in 1985 to 14% in 1989). However, closer scrutiny reveals varying levels of trade between Québec and different Community members. Shipments to three of the four main countries (United Kingdom, France, Holland) were up by more than 35%, while those to West Germany dropped by 21.5%. The sharp increases (aside from office machine and equipment exports to Holland) are attributable to exports of primary metals (aluminum, copper and alloys). Sluggish sales to West Germany resulted from an overall downturn in exports not included in the list of the main products exported. The appreciation of the Canadian dollar in relation to the German mark was also a contributing factor.

Québec exports to Japan increased by a modest 4.5% in 1989, compared with 32% in 1988. Japan's relative share of Québec's overall exports slid from 2% in 1988 to 1.8% in the first half of 1989. The growing strength of the Canadian dollar in relation to the yen since late 1988 appears to have curbed exports.

Two factors suggest that figures for the second half of 1989 respecting international exports loaded in Québec will reveal sluggish growth. The gradual appreciation of the Canadian dollar, especially against the U.S. dollar, will continue to curb growth in exports. Similarly, the gradual slowdown of the U.S. economy will dampen purchases of Québec products. However, vigorous sales of products such as aluminum and its alloys should maintain overall growth in exports for the year at 8%. In 1990, given lagging economic activity in the developed world, only favourable conditions with regard to certain products make possible a prediction of sustained growth in Québec's international exports, which should reach roughly 5%.

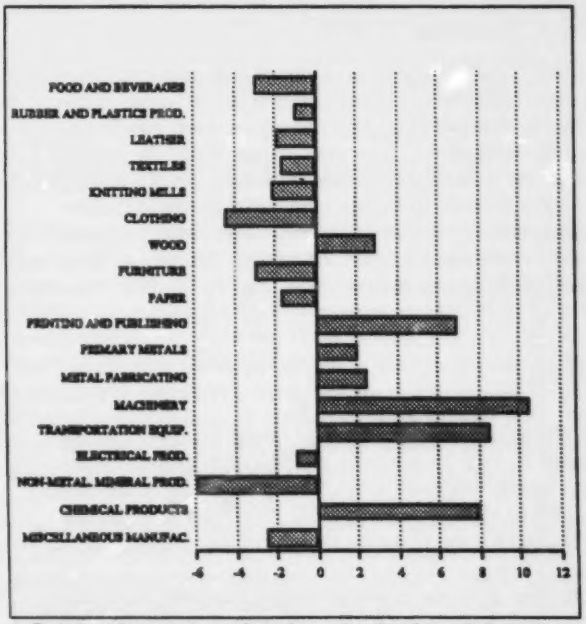
UTILIZATION OF HUMAN RESOURCES

In 1989, the Québec manufacturing sector continued to be a major source of new jobs, especially in the durable goods industries. At the same time, wages continued to rise. Following several years of prosperity, companies are now more concerned with reducing the number of person-days lost in work stoppages than in containing wage increases.

EMPLOYMENT

In 1989, Québec consolidated the gains of previous years, though job creation slowed somewhat. Overall, the provincial economy created 34 000 jobs (data for the first eleven months), a growth rate of 1.1%. This is below the exceptional performance in terms of job creation achieved in 1987 and 1988: in two years, 175 000 jobs were created,

WAGE EARNERS IN THE MANUFACTURING SECTOR*
QUÉBEC
PERCENTAGE CHANGES
1989 / 1988**



* Excluding tobacco products and petroleum and coal products, which are not presented because samples were too limited.

** First nine months.

an average annual increase of 3.1%. A similar slowdown was noted in Ontario, where the rate of job creation declined from 4.2% in 1988 to 1.8% in 1989.

Male workers were most affected by the downturn in job creation in Québec: in one year, employment gains for men fell from 2.8% to 0.6%, resulting in an increase from 8.9% to 9.1% in unemployment among men. The unemployment rate among women diminished from 10.2% to 9.7%. Unemployment among 15- to 24-year-olds fell slightly, from 13.4% in 1988 to 13.2% in 1989, compared with 28% in 1983 (among 15- to 19-year-olds), and 21% (among 20- to 24-year-olds).

After falling steadily for five years, the overall Québec unemployment rate levelled off in 1989, reaching 9.3%, compared with 9.6% in 1988. The same situation prevailed in Ontario, where unemployment in 1989 remained at the 1988 level.

In 1988, the manufacturing sector accounted for 64% of new jobs in Québec, a 9.4% increase in the sector, equivalent to 52 000 jobs. However, this remarkable performance was unusual. In 1989, growth in employment in the manufacturing sector rose steadily but less markedly.

The Québec manufacturing sector created 18 500 jobs in 1989, equivalent to 55% of all new jobs that year. It continued to outstrip the Ontario manufacturing sector, where employment has stagnated since 1987. In 1989, Québec accounted for two out of three new manufacturing jobs in Canada, more than 90% of them full time.

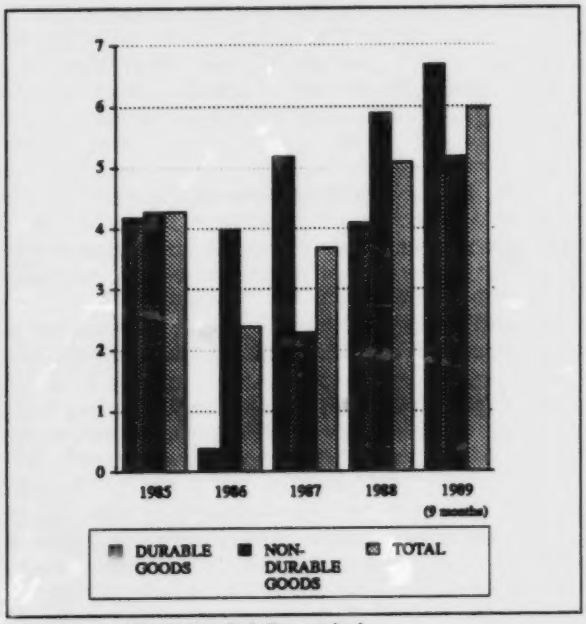
A Statistics Canada wage survey breaks down increases in the number of jobs in various major manufacturing industry groups, although the data should be used cautiously, given the limited samples used. One trend is readily apparent: the durable goods industries have been a driving force in job creation in the manufacturing sector in Québec in recent years. Between 1984 and 1989, employment in these industries rose by 18%, compared with only 4.5% in the non-durable goods industries.

WAGES

Wage increases in the Québec manufacturing sector continued to gain momentum in 1988; the growth in the average hourly wages of employees paid by the hour rose from 2.4% in 1986 to 3.7% in 1987, 5.2% in 1988, and 6% in 1989 (data for the first nine months of the year).

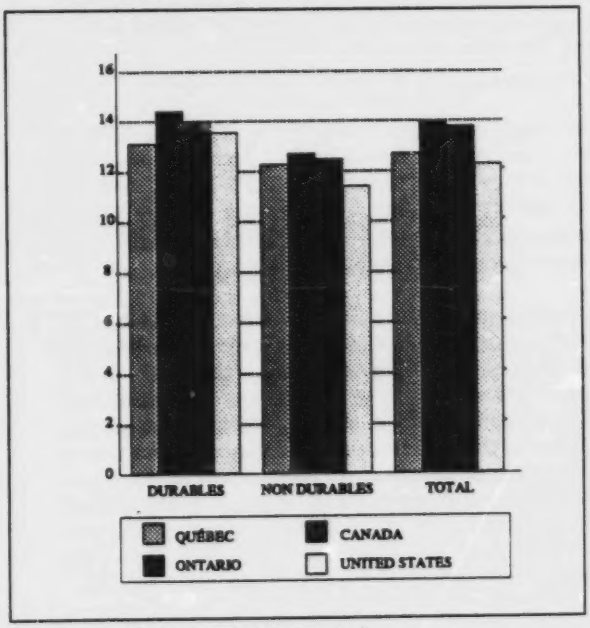
The increase in average hourly wages was striking in the durable goods industries (6.7%), because of heavy demand for manpower, although wages in the sector were 8.5% below the corresponding Canadian average (compared with

AVERAGE HOURLY EARNINGS IN MANUFACTURING*
QUÉBEC
ANNUAL PERCENTAGE CHANGES



* Employees paid by the hour (including overtime)

AVERAGE HOURLY EARNINGS IN MANUFACTURING*
QUÉBEC, ONTARIO, CANADA, UNITED STATES**
JUNE 1989 (IN CANADIAN DOLLARS)



* Employees paid by the hour (including overtime)
** Conversion rate: C$1. 1984= US$1.00 (June 1989 average).

10% the preceding year), and 11% lower than the Ontario average (as against 13% the preceding year). As a result of the appreciation of the Canadian dollar, Canadian wages in the durable goods sector reached 107% of American wages in the same sector.

Hourly wages in the Québec non-durable goods industries increased more slowly than in the durable goods sector (5.4%); such increases were only 3% below the Canadian average, and nearly 6% higher than the corresponding American hourly wage.

Weekly wage increases topped 6.5% in four industry groups in Québec. After four years of stagnation or actual decline, wages in the clothing industry rose 8.4%, the first significant increase in current dollars over their 1985 level (data for the first nine months of the year). However, weekly wages in this industry group were the lowest in Québec. The tobacco products and primary metals industries, two of the three highest ranking groups in terms of weekly wages, maintained their advance with sharp increases in 1989, i.e. 8.2% and 6.8%, respectively (data for the first nine months of the year). The machinery group (7.7%) was the fourth group to post a significantly above-average increase in weekly wages in 1989.

LABOUR RELATIONS

According to Ministère du Travail statistics, since 1984 the number of person-days lost in work stoppages in the Québec manufacturing sector has declined fairly steadily. A 5.5% drop was recorded in 1985, followed by a 23.1% drop in 1986, a 3.2% increase in 1987, a 32.9% drop in 1988, and a 17.9% drop in 1989 (data for the first ten months of the year). Over five years, the number of person-days lost in work stoppages was more than halved. It must be concluded that recent economic expansion in the Québec manufacturing sector has meant that employers and unions are more inclined to share prosperity through wage increases than to engage in systematic confrontation during collective bargaining.

Overall data encompass wide variations from industry group to industry group, depending on the renewal of collective agreements. The electrical products sector accounted for more than 20% of the person-days lost in 1989 (data for the first ten months of the year), due to the 34-day strike by CAE Électronique's 1 100 employees. On the other hand, the year was remarkably free of labour strife in the primary metals industry.

Of 586 collective agreements up for renewal in the first eleven months of 1989, 84.5% have not, to date, involved work stoppages. However, the average number of work days lost per person remained stable, rising from 32.2 days in 1988 to 32.7 in the first ten months of 1989.

In 1989, more than 69 000 workers in the Québec manufacturing sector renewed their collective agreements, of which 60 100 renewed their contracts without labour disputes or are still negotiating. In 1990, at least 926 collective agreements will expire; 96 619 workers will be engaged in collective bargaining, 39.4% more than in 1989. General Motors is the only employer to bargain with more than 1 000 employees. Industries in which a significant number of collective agreements will expire or a large percentage of employees will be negotiating new contracts include food and beverages (149), paper (98), metal fabricating (96), and wood (82).

UTILIZATION OF OTHER FACTORS OF PRODUCTION

The capacity utilization rates of virtually all the major industry groups declined. Québec manufacturers kept investing heavily, though, despite a slowing down announced in the second half of the year. The paper and primary metals industries played a key role in this respect.

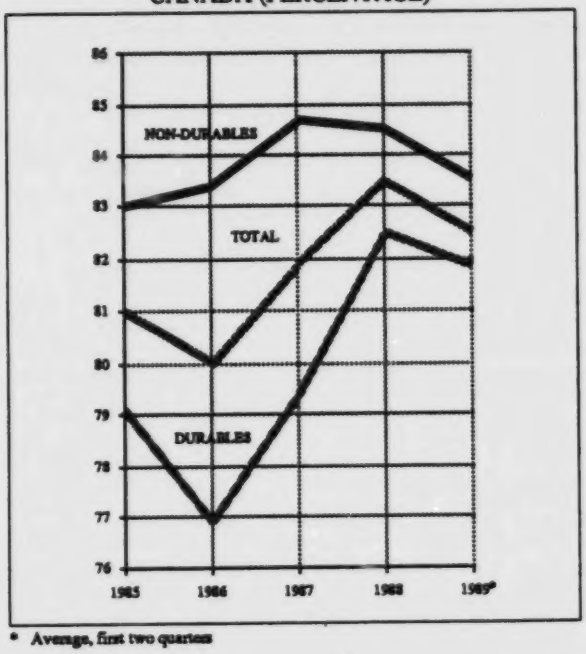
Growth in R & D expenditures continued, but less briskly than in 1987. The transportation equipment, electrical and electronic products and chemical products industries continued to lead the way. Recent studies reveal that, while production automation and computerization technologies are not extensively used in Québec and Canada, their use should become more widespread in the near future.

CAPACITY UTILIZATION RATES

The capacity utilization rate in Canadian manufacturing industries reached 82.2% in the second quarter of 1989, compared with 83.5% in 1988, an all-time high in the 1980s. Figures for the second quarter of 1989 marked the fourth successive quarterly drop recorded in the durable and non-durable goods industries. Although the rate in the non-durable goods industries remained above that in the durable goods industries (83% compared with 81.5%), the gap between the two continued to narrow. In 1986, the discrepancy was more than six percentage points.

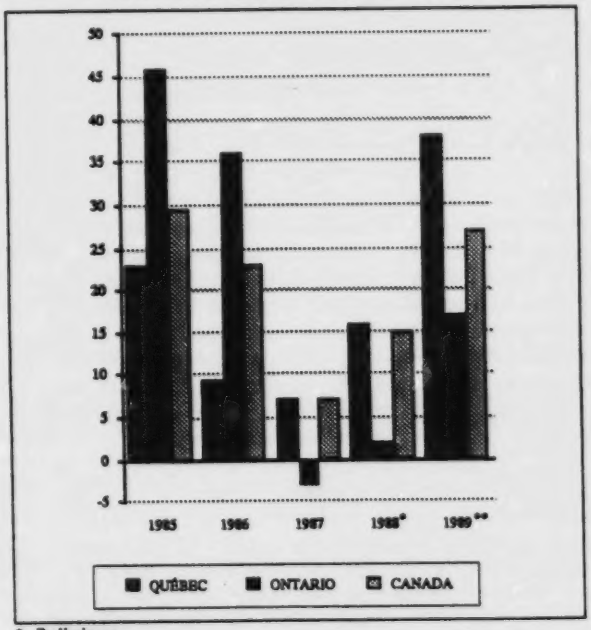
The downturn in capacity utilization occured in 14 of the 22 major industry groups. The wood, paper and plastics products industries recorded the greater drops, which reflect more difficult market conditions. Among the few industries which posted increases, only the rubber products industry enjoyed a notable upturn. Despite the general

CAPACITY UTILIZATION RATES
MANUFACTURING SECTOR
DURABLE AND NON-DURABLE GOODS
CANADA (PERCENTAGE)



* Average, first two quarters

CAPITAL SPENDING IN MANUFACTURING
QUÉBEC, ONTARIO, CANADA
ANNUAL PERCENTAGE CHANGES



* Preliminary.

** Estimates revised at mid-year.

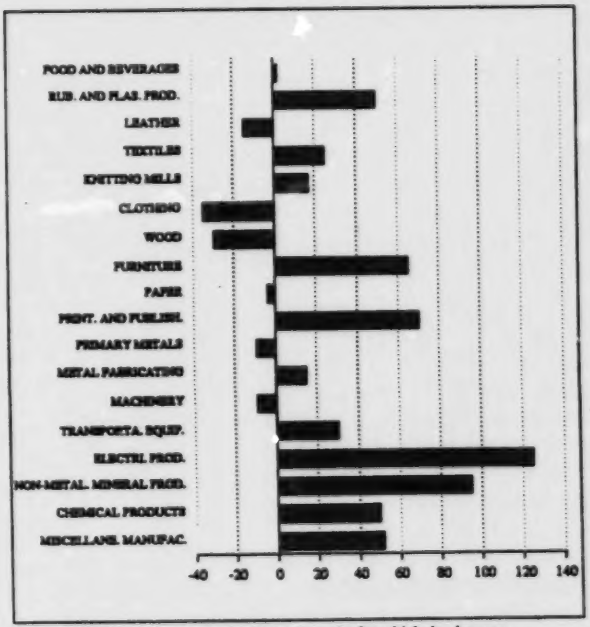
decline, the primary textiles, primary metals, electrical and electronic products, and chemical products industries continued to operate close to full capacity, with a capacity utilization rate of nearly 95%.

A comparative analysis of Québec and Canadian industrial structures reveals that the downward trend in capacity utilization rates also applies to Québec, although it was somewhat attenuated. Several of the leading industries in Québec continued to post high rates. Reduced capacity utilization should somewhat mitigate inflationary pressures on industrial and, more generally, consumer prices; its effect has already been felt. However, capacity utilization is but one factor which affects consumer prices.

INVESTMENT

According to Statistics Canada mid-year forecasts, total capital spending in Québec should exceed $30 billion in 1989, a 9.7% increase over 1988. Investment rose for the seventh consecutive year, and all forecasters stressed the vital importance of this component of overall demand in Québec at this stage of the economic cycle.

CAPITAL SPENDING IN MANUFACTURING*
QUÉBEC
PERCENTAGE CHANGES
1989 / 1988**



* Excluding tobacco products and knitted goods, for which the data are confidential.

** 1988: Preliminary. 1989: Estimates revised at mid-year.

The Québec manufacturing sector displayed remarkable vitality; investment gains were the highest they have been since 1980. Mid-year forecasts of increases (38.3%) applied both to capital spending on construction (42.5%) and on equipment (37.2%). Capital spending on construction in the manufacturing sector almost doubled in two years, an achievement unequalled since the early 1970s.

Statistics Canada's mid-year announcement of such striking increases in investment in the Québec manufacturing sector reflected greater confidence in the health of the economy. Mid-year forecasts outstripped initial estimates, published in February. Capital spending forecasts in the Québec manufacturing sector were raised 8.7%, compared with only 0.6% for Ontario.

When the Statistics Canada mid-year forecasts are analysed, it must be remembered that, starting in the third quarter, the agency noted a slowdown in investment among businesses. The first signs of a reversal in the upward trend appeared during the summer of 1989, slightly earlier than most forecasters predicted.

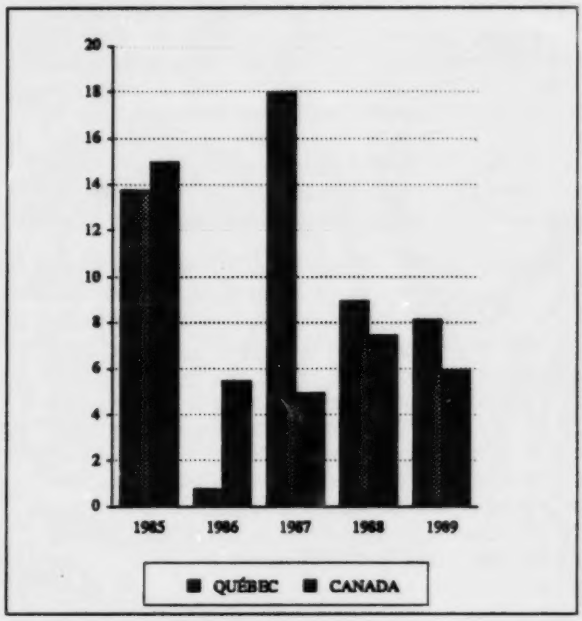
The robust health of the Québec manufacturing sector is reflected in Québec/Ontario and Québec/Canada capital spending ratios. In 1989, the anticipated vigour of industrial investment in Québec should raise the Québec/Ontario and Québec/Canada capital spending ratios by 69.6% and 28.5%, respectively, compared with averages of 43.4% and 19.6% between 1979 and 1982.

In 1989, capital spending increases in the Québec manufacturing sector were largest in the following industry groups: non-metallic mineral products (126.1%), petroleum and coal products (98.7%), primary metals (71.5%) and paper (64.5%). Sectorial data indicate that the latter two industries were largely responsible for growth in capital spending, accounting for over $1 billion, or 71% of the increase in capital spending in the Québec manufacturing sector assigned to specific industry groups in 1989. They accounted for 49% of overall capital spending.

RESEARCH AND DEVELOPMENT

In 1987, total internal R & D expenditures by Québec manufacturers rose by 18% (statistics for subsequent years are not yet available), a noteworthy revival in light of the dip in such expenditures in 1986. Since 1983, the average growth rate has been 10.5%. Information now available points to more moderate growth after the exceptional upsurge in 1987. The Canadian R & D budgets of a leading group of firms in Québec (Pratt & Whitney, Canadair, Alcan, CAE, Marconi, Domtar, Matrox, QIT-Fer et Titane, and Spar) increased 15% in 1988, and 13% in 1989. These

RESEARCH AND DEVELOPMENT EXPENDITURES
MANUFACTURING SECTOR
QUÉBEC*, CANADA
ANNUAL PERCENTAGE CHANGES



* 1988 and 1989, Québec's data are estimated.

figures suggest that growth in R & D spending in the Québec manufacturing sector is once again in line with the average for the 1980s; such spending reached an estimated $900 million in 1989. Growth in overall R & D spending in the Québec manufacturing sector since 1981 has been slightly higher than that in Canada as a whole. After dropping in 1985 and 1986, Québec's share of all technological activity in Canadian manufacturing industries increased in 1987. Between 1987 and 1989, this trend should continue, since Québec's growth rate appears to have been slightly above that of Canada overall.

Transportation equipment, electrical and electronic products, and chemical products dominated in terms of manufacturing R & D. The three industry groups accounted for more than 75% of all manufacturing R & D spending in Québec and Canada as a whole, and they are playing an increasingly important role.

The transportation equipment industry, with aeronautics as its spearhead, is unequivocally the leading technological

sector in Québec, and second in importance in Canada. Pratt & Whitney, which has the largest privately owned research centre in Québec, and Canadair, are at the forefront in this field. Québec's share of the technological activity in the Canadian transportation equipment industry followed general trends; two consecutive annual downturns brought Québec's share to 47% in 1987; it subsequently rose to 52%. An analysis of Québec R & D spending in recent years and the 1989 R & D budgets of firms operating primarily in Québec indicates that the latter's share of all R & D spending in Canada should reach roughly 50% in 1989. The transportation equipment industry would now appear to account for 36% of all R & D spending in the Québec manufacturing sector.

The electrical and electronic products industry ranks second in Québec in terms of technological activity and first in Canada as a whole. It is also the most dynamic industry: its share of overall R & D spending in the Québec manufacturing sector increased from 22% in 1983 to 29% in 1987. Québec's share of manufacturing R & D spending in Canada has risen constantly over the past five years, from 12% in 1983 to 16% in 1987. Based on 1988 and 1989 Canadian estimates, and bearing in mind more pronounced growth in such spending in Québec in the past, this figure should reach 18% in 1989. The industry's share of total manufacturing R & D spending in Québec should remain around 29%.

In 1987, the chemical products industry accounted for 10% of all R & D spending in the Québec manufacturing sector; this figure has been fairly stable in recent years. With the adoption of Bill C-22 providing better patent protection for pharmaceuticals, numerous projects were launched, including those of Merck Frosst, Squibb and Nordic Laboratories. Pharmaceutical companies are committed to investing $14 billion in R & D in Canada by 1996; Québec accounts for a sizeable share of such spending. In 1989, the Québec chemical products industry could account for 11% of all manufacturing R & D spending in the province, and 27% of such spending in Canada as a whole.

Several factors affect technological development activities in Québec companies, in particular market prospects, the availability of capital and specialized manpower, and government initiatives. With regard to the last factor, the renewal of Québec and Canadian policies respecting technological development has, by and large, been completed. Stable tenets in such policies will benefit firms wishing to invest in R & D and innovation. In this respect, tax incentives are the cornerstone of Québec policies. The technology development fund will play a vital role in relation to a number of strategic development strategies. With a budget of $300 million over five years, the fund will encourage major, strategic projects. The collaboration promoted by the fund between businesses, universities and government laboratories is a crucial component in today's technological development.

Current moves toward freer trade will give strong impetus to technological development in the coming years, as witnessed by the Canada-U.S. Free Trade Agreement, ongoing multilateral GATT negotiations, and the creation of a single market in Europe in 1992. Important spinoff is expected from Canada's participation in a number of major international technological projects, such as the orbital station and the Radarsat and Olympus programs. Québec must stress innovation to deal with international competition.

NEW PRODUCTION TECHNOLOGIES

Although it is often not easy to discern the current state of new production technologies, a number of observations can be drawn from recent studies of the penetration of production automation and computerization technologies in the Québec manufacturing sector, in particular the study of the CAD/CAM Association intitled *Tendances et degré de pénétration, l'automatisation et l'informatisation de la production* (October 1989, 131 pages). Analyses of the use of new production technologies usually concur with those devoted to R & D. The same forces come into play and the same results are observed. Moreover, both activities are often closely linked in businesses. A considerable portion of R & D centres on the creation and development of new production technologies focusing on automation and computerization. The electrical and electronic products and transportation equipment industries have, until now, made the most extensive use of these technologies, i.e. industries in which R & D plays a pivotal role. In relation to their competitors, though, Québec manufacturers do not enjoy an advantageous position in terms of R & D and use of new technologies. While they compare favourably with their Canadian counterparts, they lag behind their main international competitors.

The use of automated, computerized production technologies is closely tied to the sector in which the business operates. In addition to the sectors mentioned earlier, the plastics products and machinery industries are noteworthy because of their use of such technologies. Québec's industrial structure partly explains the modest penetration of new technologies. There is a readily apparent correlation between the size of the company and the use of these technologies, i.e. the bigger the firm, the more widespread the use of new production technologies. However, uncertainty persists as to the cause and the effect in this relationship. The same applies to the inclination to export. Do the demands of international competition compel

exporting firms to modernize production processes, or does the use of new technologies and the resulting improvements encourage businesses to try their luck on foreign markets?

The reasons given by businesses when they implement new production technologies vividly underscore the vital importance of competition. Manufacturers adopt such technologies to deal with competition on domestic and international markets, to lower production costs, increase production capacity, and improve the quality of their products.

However, automation and computerization technologies have not made appreciable inroads in Québec yet. Indeed, more than 60% of firms in eight industries which account for roughly 50% of output in the manufacturing sector do not use any of the six main categories of new technologies. When technologies are used, in most instances only one type is implemented, usually numeric-controlled machines or machine tools. As is the case in the realm of innovation and R & D, a lack of funds and, above all, insufficient information on the benefits of new technologies hinder their penetration. Uncertainty and risk also surround the introduction of new equipment.

In the coming years, companies will stress the introduction of inexpensive technologies such as CAD/CAM systems, manufacturing process control equipment and software, and computerized production management software. Although these technologies will become the most widespread, half of investments will be earmarked for costlier technologies, e.g. numeric-controlled machines and machine tools. Such trends would encourage wider use of new production technologies in small businesses, and consolidation in bigger ones.

COMPETITIVENESS

As a result of a tight labour market, unit production costs continued to rise in Québec and in Canada as a whole. Recent, appreciable increases in employment in the Québec manufacturing sector engendered a technical drop in productivity per person-hour worked in the manufacturing industry, although this trend should reverse itself in the near future.

In 1989, manufacturers' basic earnings declined (for the first time since 1982), by 10% (Canadian data for the first nine months of the year), due largely to the situation in the pulp and paper industry.

The number of bankruptcies in the manufacturing sector rose considerably in 1989; the liabilities involved accounted for 61% of the Canadian total. This situation again illustrates the greater cyclical sensitivity of the Québec manufacturing sector, the first to feel the financial effects of a recession or an impending downturn, and the first to recover from such a downturn.

UNIT LABOUR COSTS AND PRODUCTIVITY

Changes in productivity in the Québec manufacturing sector should be examined in relation to long-term international trends.

In the wake of the 1973 oil shock, none of the major industrialized nations achieved in the course of the 1970s the exceptional gains in output per person-hour recorded during the 1960s. For example, in the Canadian manufacturing sector, productivity growth fell from 4.5% (1960-1973) to 2.1% (1973-1979). Results during the 1980s were more varied. Only the manufacturing sectors in the United States and the United Kingdom achieved productivity growth similar to that posted in the 1960s, while many countries experienced sluggish growth. In Canada, the average annual growth rate rose from 2.1% (1973-1979) to 2.2% (1979-1988); only in Denmark was slower growth noted.

Changes in unit labour costs calculated in U.S. dollars were largely attributable to spectacular currency realignments in the industrialized countries. Whether unit labour cost increases in the manufacturing sector are expressed in Canadian or U.S. dollars, in 1988 Canada ranked third among the 12 principal industrialized countries.

In 1988, unit labour costs in Canada, expressed in Canadian dollars, rose 2.9%, a rather high figure. The unwavering strength of the Canadian dollar meant that, were the same unit costs measured in U.S. dollars, they would have risen 10.9%. Data for the first half of 1989 accentuate the trend to a steady increase in unit labour costs in the Canadian manufacturing sector (in Canadian dollars, 5.3% for the country as a whole, and 4.6% in Québec).

Long-term changes in productivity in the Québec manufacturing sector closely followed those noted in Canada between 1979 and 1987, both in terms of output per person-hour worked and unit labour costs (in the first instance, a 19.8% increase in Québec, and 19.6% in Canada; in the second, a 54.6% increase in Québec, and 52.4% in Canada).

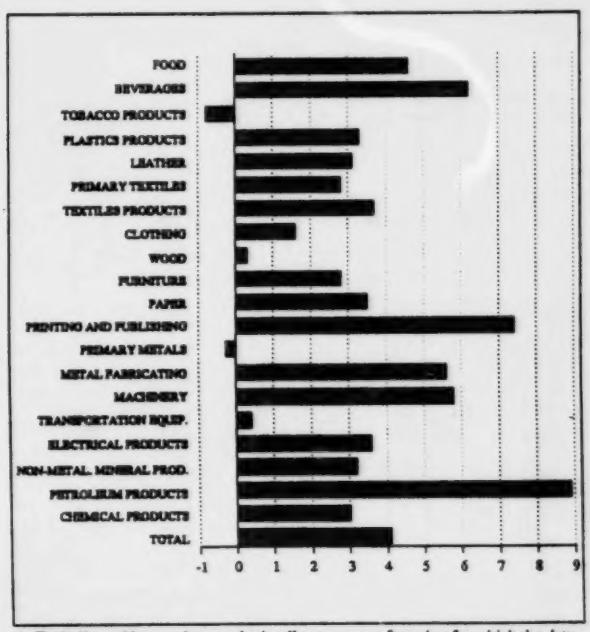
Since early 1988, Québec and Canadian unit labour costs have continued to be closely aligned, e.g. over an 18-month period, they reached 8.25% in Québec, and 8.40% in

Canada. However, in 1988, Québec recorded an appreciable drop in manufacturing output per person-hour worked (-7.6%), compared with -0.1% in Canada.

The remarkable growth in employment in 1988 in the Québec manufacturing sector—more than 50 000 jobs were created—brought in mechanistic fashion a decrease in manufacturing productivity per person-hour in the province. In the very short term, the arrival of new employees always causes productivity to drop, and this should be no ground to worry over long run evolution. Quite the reverse. New employees gain experience; such human resources combined with new investment, especially abundant in the Québec manufacturing sector in 1989, augur well for future structural changes in productivity. In the first half of 1989, Québec's performance in this respect was by and large in line with that of Canada; productivity was stable.

Between 1981 and 1988, average annual productivity gains in four Québec industries exceeded 3.5%: tobacco products (9.7%), primary metals (6.7%), wood (4.5%), and transportation equipment (3.6%). Over the same period, average annual gains declined in five industries: petroleum products (-4.5%), machinery (-2%), printing and publishing (-1.8%), beverages (-1.6%), and metal fabricating (-0.6%).

UNIT LABOR COSTS*
QUÉBEC
AVERAGE GROWTH RATE
1981-1988



* Excluding rubber products and miscellaneous manufacturing for which the data are confidential.

A strong reverse correlation has been noted between changes in productivity and unit labour cost growth. From 1981 to 1988, the five Québec industries that experienced the sharpest drop in productivity also recorded, by far, the highest unit labour cost increases, i.e. between 5.6% and 8.9%. The four industries in which productivity increases were the highest posted changes in unit labour costs between +0.4% and -0.8%.

It should be noted that the labour productivity indicator does not take into account any improvement in the quality of products. Between 1981 and 1988, for example, price increases in the plastic products industry (42.5%) largely exceeded average price increases in the manufacturing sector (28.1%). It seems reasonable to conclude that real changes in productivity in this sector are more pronounced than various calculations suggest, as price hike differentials may reflect an improvement in quality.

PROFITS AND BANKRUPTCIES

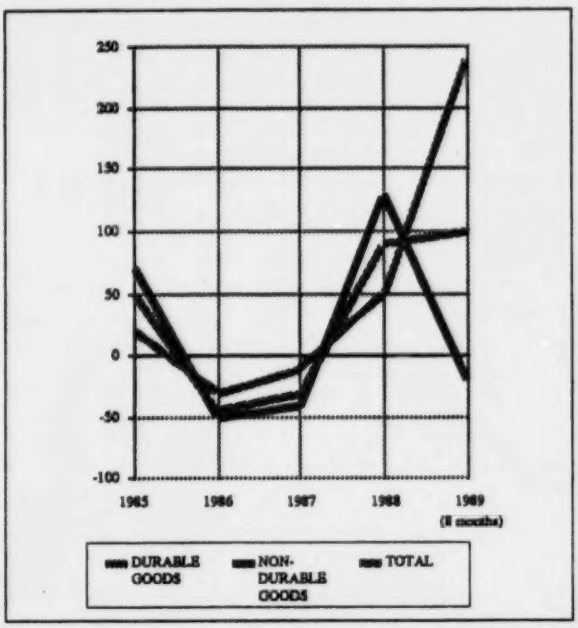
For the first time since 1982, Canadian manufacturers recorded significantly reduced basic earnings.

Following six consecutive years of growth, earnings fell 9.9%, totalling barely $23.766 billion in the third quarter of 1989, compared with 19.4% and 16.8% in 1987 and 1988, respectively. This reduction in profits is attributable primarily to the paper and forest industries (-16.5%) and, to a lesser extent, the chemical industry (-12%), metal fabricating (-16.9%), and printing and publishing (-33.1%). These industries account for a substantial portion of overall earnings in the Canadian manufacturing sector, and nearly one-third of Québec manufacturers' shipments.

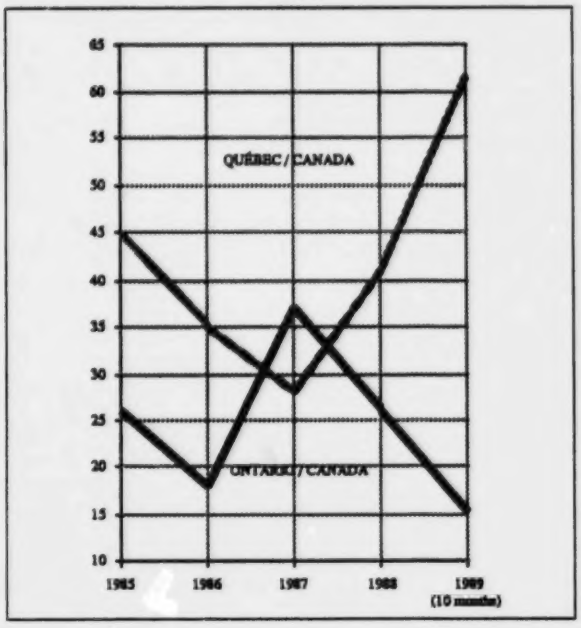
For the second consecutive year, the number of bankruptcies in the manufacturing sector rose significantly, more noticeably so in Québec, where the increase reached 20%, compared to less than 6% in Canada as a whole. In the first ten months of 1989, the number of bankuptcies increased by 48 (23%), the highest growth since the 1982 recession (52.5%). The attendant liabilities rose by more than $82 million to $171 million, a 92.7% increase, compared with 90.1% in 1988. High interest rates and sluggish domestic demand explain these figures.

In the first eight months of 1989, 21.1% of the bankrupt production units accounted for 61.4% of the liabilities. Once again, the increase was engendered by a limited number of failures in two major manufacturing industry groups. Volcano in Saint-Hyacinthe ($45.2 million) and the St-Raymond paper company ($36.5 million) alone accounted for 47.8% of all liabilities in the manufacturing sector.

LIABILITIES INVOLVED IN BANKRUPTCIES
MANUFACTURING INDUSTRIES
QUÉBEC
ANNUAL PERCENTAGE CHANGES



LIABILITIES INVOLVED IN BANKRUPTCIES
MANUFACTURING INDUSTRIES
QUÉBEC / CANADA AND ONTARIO / CANADA
(PERCENTAGE)



Some 18 bankruptcies in the metal fabricating industry accounted for $56.7 million in liabilities. There were 35 bankruptcies in the wood and paper industries, involving an estimated $44.7 in liabilities, followed by 19 failures in the non-metallic mineral products and transportation industries ($6.9 million and $3.2 million, respectively). All told, these 71 failures, involving liabilities of $111.5 million accounted for 32% of all bankruptcies in the manufacturing sector, and nearly two-thirds of all liabilities.

Bankruptcies in the Québec manufacturing sector accounted for over 45% of the Canadian total; liabilities accounted for 61% of the Canadian total. Durable goods manufacturers were more affected. However, the situation of non-durable goods manufacturers was generally better than in 1988.

THE TRADE SECTOR

THE TRADE SECTOR

CONSUMER PRICES

During the first eleven months of 1989, the all-items consumer price index rose 4.5% in Montréal and 3.9% in Québec City; in 1988 the average inflation rate stood at 3.8% in Montréal and 3.6% in Québec City. The overall Canadian index climbed 4.9% in 1989, compared with 4% in 1988. Once again, the inflation rate in Toronto was noteworthy for its high average inflation rate, which reached 6.3%.

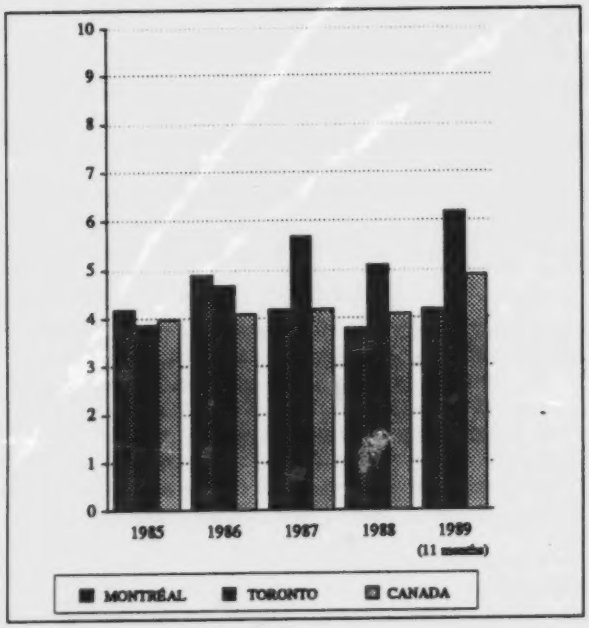
The Montréal consumer price index was driven up by the increased cost of tobacco products and alcoholic beverages (7.5%) and housing (4.8%). Slight increases in energy (2.2%), transportation (3.6%), clothing (3.6%) and recreation (4%) helped keep inflation below 5%. Inflationary pressures came from services (4.9%) and durable goods (4.6%); price increases were more moderate with respect to non-durable goods (4.3%) and semi-durable goods (4.1%).

In Québec City, the inflation rate in 1989 was 3.9%, compared with 3.6% in 1988. The increased cost of housing (4.2%), health and personal care (4.6%) and tobacco products and alcoholic beverages (7.1%) were by and large responsible for fuelling inflation. Less striking increases in the cost of transportation (2.8%), clothing (3.1%), food (3.4%), and energy (3.4%) kept inflation at levels scarcely higher than the preceding year. Inflationary pressure came from durable goods (4.3%) and services (4.1%); the price of semi-durable and non-durable goods rose 3.5% and 4%, respectively.

Despite a tight money policy aimed at curbing the appreciable increase in the Canadian consumer price index, the economy shows no tangible indications of significant flagging. The average capacity utilization rate reached 82.2%, as against 83.5% in 1988. During the first half of 1989, the Québec GDP grew at an average rate of 7.6%. Continued economic vigour and underlying inflationary pressures will probably lead to continued high interest rates. Next fall, however, reactions by consumers and various economic agents to the GST will spur inflation well into 1991. The drop in short-term interest rates should be short lived; the rates will rise again as January 1, 1991 approaches.

Pressure exercised by 1989 wage settlements must not be overlooked. Wage increases in the first and second years of collective agreements negotiated during the first half of

CONSUMER PRICE INDEX
MONTRÉAL, TORONTO, CANADA
ANNUAL PERCENTAGE CHANGES



1989 hovered around 5.2%, compared with 3.3% and 4.8% in 1987 and 1988, respectively.

These trends suggest that heavy inflationary pressures will prevail when the GST is introduced; they could be hard to counteract in the short term.

SALES

Following an upsurge in sales in 1988, wholesale trade levelled off in 1989. A sharp drop in inventories reflected merchants' expectation of a renewed economic slowdown. Wholesale merchants' sales continued to decline, both with respect to durable and non-durable goods.

WHOLESALE TRADE

For the first eight months of 1989, combined wholesale merchants' sales in Québec totalled $32.5 billion, a 0.5% increase over the same period in 1988. This slowdown was especially striking given that, in 1988, Québec enjoyed one of its best years, when it recorded a more than 11% increase in sales. In 1989, growth in sales lagged behind that in Ontario (6.2%), and in Canada as a whole (3.7%).

During this period, Canadian wholesale merchants' sales of metals, hardware, and plumbing and heating equipment climbed 10.1%, compared with 14.4% in 1988; food wholesalers recorded a 6.9% increase in sales (5.5% in 1988), while sales of other machines and equipment went up by 4.8% (17.2% in 1988). Sales of farm products (except grain), paper and paper items, scrap and waste material increased by 9.8% (14.6% in 1988). Sales of farm machinery and equipment were the major disappointment in the wholesale trade sector, down 25.7% in 1989, and 12.6% in 1988. Tobacco products, pharmaceuticals and toiletries dropped 4.1% in 1989, compared with a 0.7% increase in 1988. Wholesale lumber and construction materials merchants' sales fell 1.9% in 1989, compared with a 4.4% rise in 1988.

In the first eight months of 1989, Québec wholesalers' inventories declined a significant 4%, after increases of more than 10% in the preceding three years. Only the prairie provinces recorded a similar downturn (1%, compared with 6.2% in 1988). The reversal was most pronounced in Québec, where it reached nearly 20 percentage points. In Ontario, inventories grew by 3.8% in 1989, as against 5.9% in 1988; the Atlantic provinces recorded the highest increase (5.7%, compared with 12.1% in 1988). In Canada as a whole, inventories were up slightly, by 3.4% (6.1% in 1988).

In Québec, the inventory-to-sales ratio reached 1.40 in late August 1989; it was 1.59 at the end of December 1988. The fluctuation is attributable by and large to dwindling inventories, declining even more pronounced than sales. The fluctuation is a clear indication that Québec wholesalers are looking cautiously to the future.

RETAIL TRADE

In the first nine months of 1989, retail sales reached $31.2 billion, a 2.3% increase over the same period in 1988 and the lowest rise since 1982. In real terms, this represented a 2% reduction. For purposes of comparison, retail sales in Ontario and Canada as a whole were up 5.4% and 5.3%, respectively. In both instances, this situation led to stagnating sales in constant dollars. In 1989, Québec retail sales should total $42.5 billion, barely a 2.2% increase, and the province's weakest growth over the past 20 years.

For the first time since the 1981-1982 recession, sales of durable goods tapered off, falling 1.4% between the first nine months of 1988 and 1989. The average growth rate over the preceding six years was 18%. The disappointing

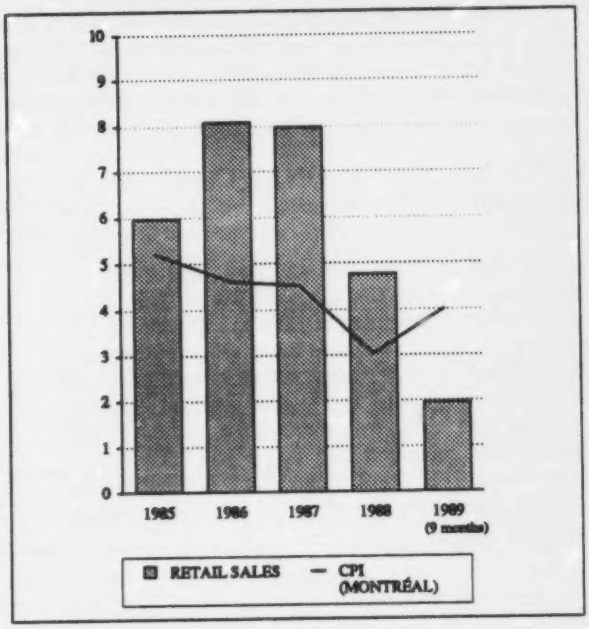
sales figures resulted primarily from a 2.6% drop in retail automobile sales and, to a lesser extent, sluggish retail furniture sales, down 3.6%. It should be noted that sales of automobile parts and accessories jumped 12.7% and benefited from slack new car sales.

If the turnover of the big three U.S. automakers is any indication, the decline in new car sales should become even more pronounced. In the third quarter of 1989, sales rose less than 2%; sales promotions in the second quarter encouraged consumers to purchase vehicles earlier than they had planned. The winter could be a difficult one for auto retailers, whose sales account for nearly one-quarter of all retail sales in Québec.

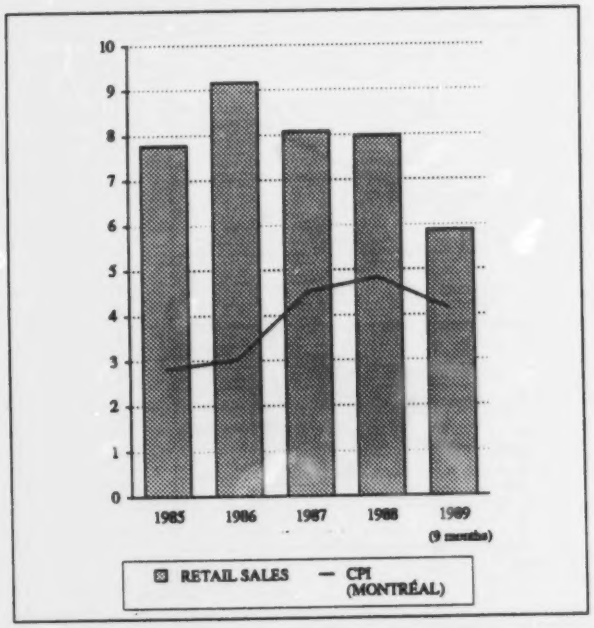
While sales of durable goods were down, figures for semi-durable and non-durable goods were up. The 5.9% growth in sales of semi-durable goods was the highest figure in the three categories of goods, although that growth rate was the lowest for semi-durable goods in six years. Sales in family clothing stores (up 16.1%), general stores (20.1%), and specialized shoe stores (41.1%) helped buoy the sector.

Sales of non-durable goods increased by 2%, an all-time low in the 1980s for this type of goods. Sales in florist shops and pharmacies were up 11.1% and 10%, respectively, while those of combination stores (groceries and

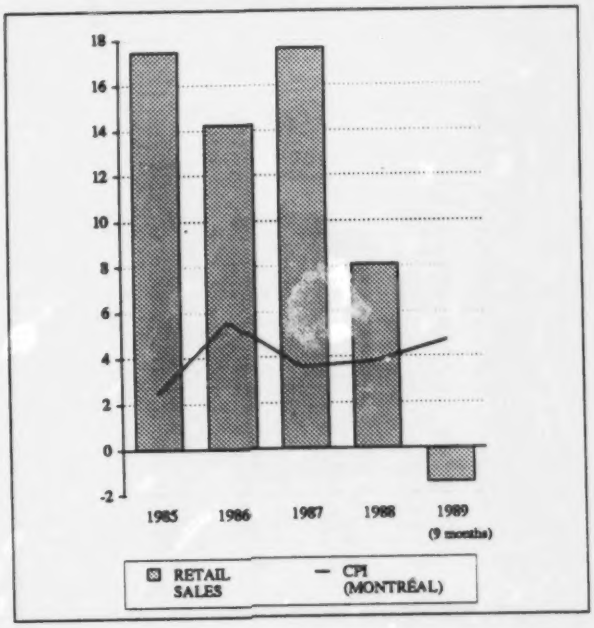
RETAIL SALES CONSUMER PRICE INDEX
NON-DURABLE GOODS
QUÉBEC
ANNUAL PERCENTAGE CHANGES



RETAIL SALES CONSUMER PRICE INDEX
SEMI-DURABLE GOODS
QUÉBEC
ANNUAL PERCENTAGE CHANGES



RETAIL SALES CONSUMER PRICE INDEX
DURABLE GOODS
QUÉBEC
ANNUAL PERCENTAGE CHANGES



meat), which account for nearly one-fifth of overall retail sales, rose 2.2%.

Sales by retail businesses in the service sector increased by 2.7% in the first three quarters of 1989, compared with the same period in 1988, a drop from the 5,7% rate of the preceding year. Among such businesses, service stations alone posted higher sales (up 4.6%, compared with 6% the preceding year). Garages recorded a 6.9% drop in sales.

FINANCING OF PERSONAL CONSUMER SPENDING

In the first half of 1989, personal disposable income in Québec increased by 11.8%, as against 7% in 1988. In real terms, this reflected advances of 7.2% in 1989 and 2.8% in 1988. However, when account is taken solely of the remuneration of wage earners (wages and other income) in the economic accounts, Quebecers' income declined somewhat over the past two years. Wages rose 7.5% in the first nine months of 1989, compared with 10.3% and 9.2% in 1987 and 1988, respectively. New provisions in taxation legislation account for sharper growth in personal disposable income than in wages.

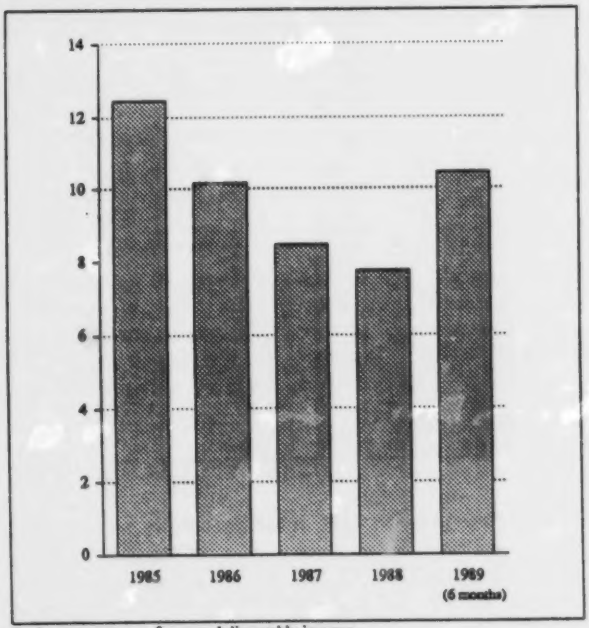
The forced saving engendered by delayed tax measures in 1988 resulted in more generous tax refunds in the first half of 1989. The greater availability of cash among consumers affected debt and savings rates at the beginning of the year, although its effects should dwindle gradually. The coming months should witness tighter household finances.

Instead of financing purchases with tax refunds, Quebecers curtailed their use of consumer credit and shored up their savings. Following four years of decline, personal savings jumped by 75% in the first half of 1989. Since 1982, the savings rate has fallen steadily, from a record high of 18.7% of personal disposable income to as little as 7.8% last year. In the first half of 1989, the savings rate reached 10.6%.

Personal consumer spending rose 7% in the first half of 1989, equivalent to a real rate of 2.5%, compared with 7.5% and 3.6%, respectively, in 1988.

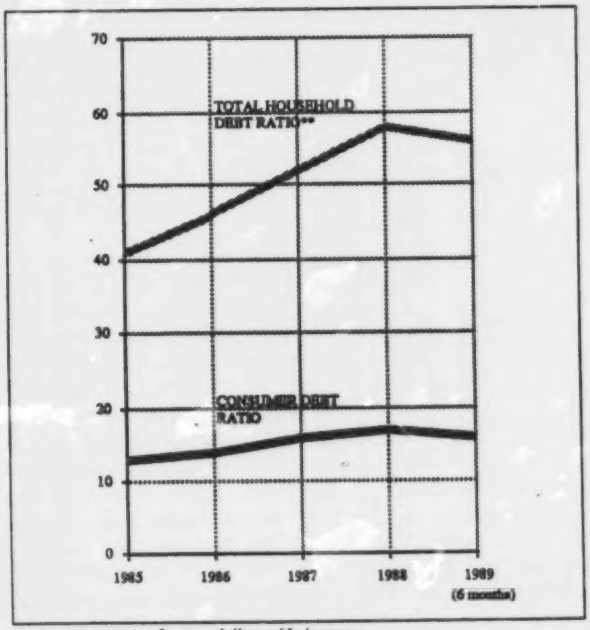
The upward trend in the rate of household debt (57.7% of personal disposable income in 1988) was arrested; in the first half of 1989, it dropped to 55.4%, mainly due to residential mortgage loans, down from 37.2% to 36.4% of personal disposable income. Consumer credit increased slightly, by 7.7%, in the first half of 1989; the rate of

SAVINGS RATE*
QUÉBEC
(PERCENTAGE)



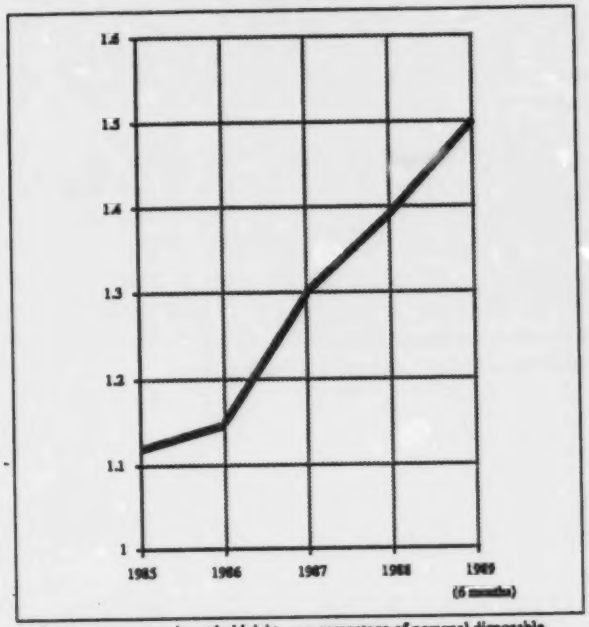
* As a percentage of personal disposable income.

CONSUMER DEBT RATIO*
QUÉBEC
(PERCENTAGE)



* As a percentage of personal disposable income.
** Total household debt includes residential mortage loans and consumer loans.

INTEREST PAYMENTS
ON CONSUMER DEBT*
QUÉBEC



* Interest payment on household debt, as a percentage of personal disposable income.

consumer debt was equivalent to 17% of personal disposable income, as against 17.6% in 1988.

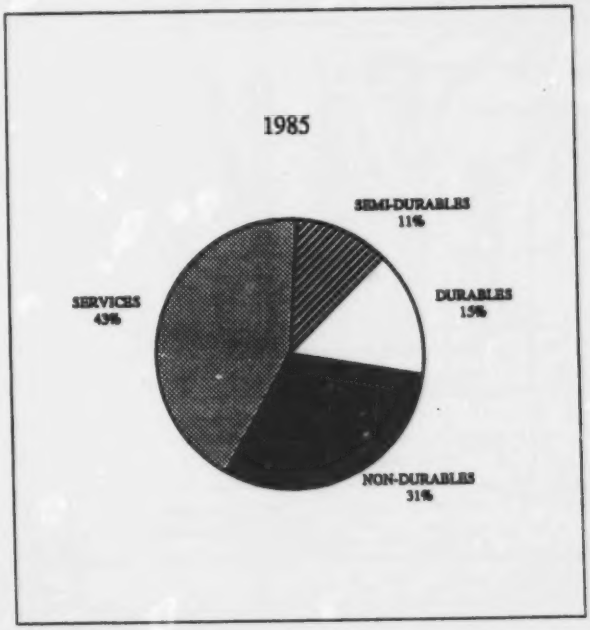
Despite the modest reduction in personal debt, high interest rates curtailed household spending. Combined with slower growth in income, the debt load dampened consumer spending. Over the past four years, the household debt burden rose constantly. An increasingly large share of household resources is allocated to repaying interest and principal on loans contracted to make purchases in the past.

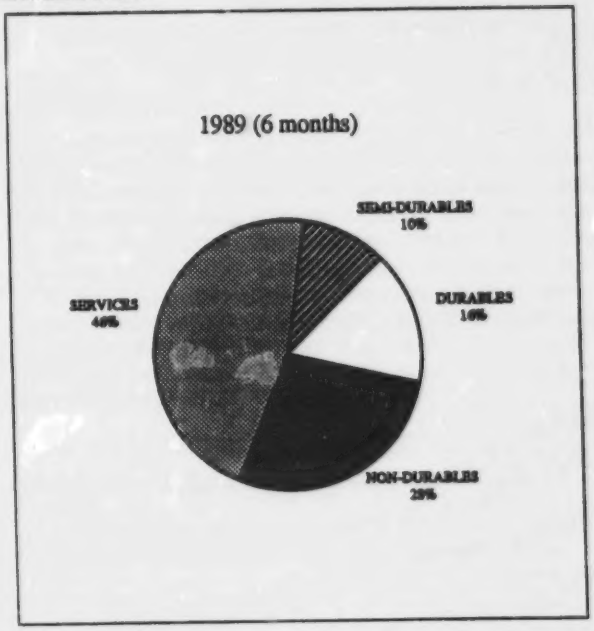
It is hardly surprising that Québec recorded growing numbers of personal bankruptcies, up 26.5% in 1988, to a total of 9 779. In the first ten months of 1989, there were 9 205 bankruptcies, a 16% increase in relation to the same period the preceding year, and 38.4% of the Canadian total.

Consumer purchasing intentions in Québec have declined almost constantly since 1987; the index reached 108.6 in the third quarter of 1989, compared with 112.9 and 147.0 the two preceding years. The index reflects shifts in consumer confidence in the growth of the economy.

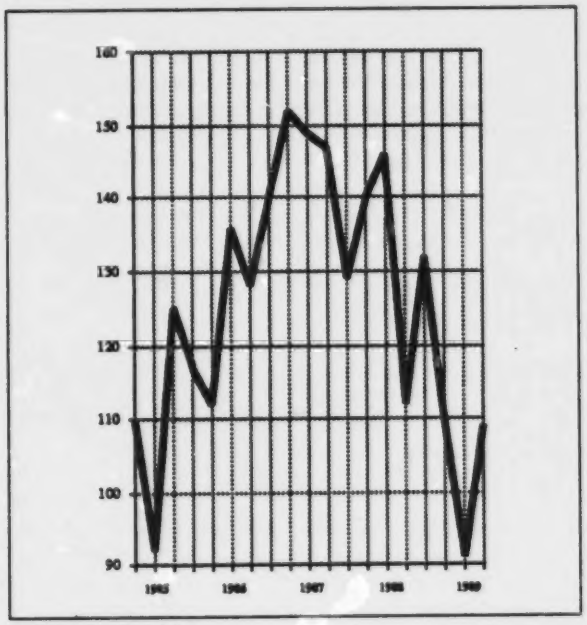
The growth in retail trade recorded from the outset of the 1980s began to slow down in the second half of 1988. Sales in early 1989 were significantly lower than in the preceding year. It is especially noteworthy that sales of

PERSONAL SPENDING ON CONSUMER GOODS AND SERVICES
QUÉBEC
PERCENTAGE DISTRIBUTION





CONSUMER PURCHASING INTENTIONS*
QUÉBEC
1961 = 100



* Seasonally adjusted data.
Source: Conference Board of Canada

durable goods were the hardest hit. Such sales are an important barometer of medium-term economic changes: they dropped off appreciably after growing steadily for six years. The situation is attributable to dwindling automobile sales and, to a lesser extent, furniture and home appliance sales.

Bearing in mind the slump in housing starts over the past two years, this is not unexpected: after rising 23% in 1987, residential construction fell 22% in 1988, and 17% in the first nine months of 1989. A revival in consumption and, in particular, purchases of durable goods, is unlikely in the near future. Consumers are expected to curb spending and save more, to take advantage of high interest rates. Retail sales could increase by roughly 5% in 1990.

UTILIZATION OF HUMAN RESOURCES

In 1989, job creation was brisk in the Québec trade sector; wages, which remained stable, were not subject to inflationary pressures.

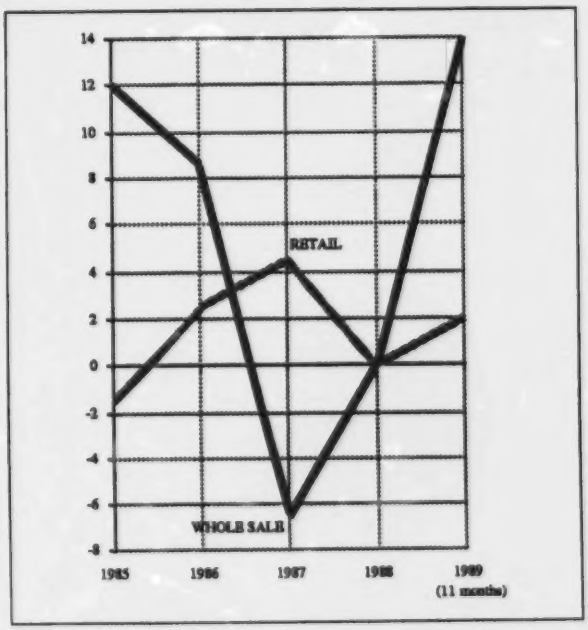
EMPLOYMENT

In the first eleven months of 1989, 26 000 jobs were created in the Québec trade sector, most notably in the wholesale sector. Québec's satisfying performance constrasts with the loss of 34 000 jobs in the trade sector in Ontario.

Québec's wholesale trade sector lost 10 000 jobs in 1987, which were not regained in 1988. In 1989, 18 000 jobs were created in the sector, a 13.9% increase over the preceding year. Nearly 90% of the jobs were full time.

Employment in the retail trade sector also slumped in 1988. In 1989, the 2.2% gain recorded was more modest than in the wholesale trade sector, but nonetheless significant. More than two-thirds of these new jobs were full time.

EMPLOYMENT IN THE TRADE SECTOR
QUÉBEC
ANNUAL PERCENTAGE CHANGES

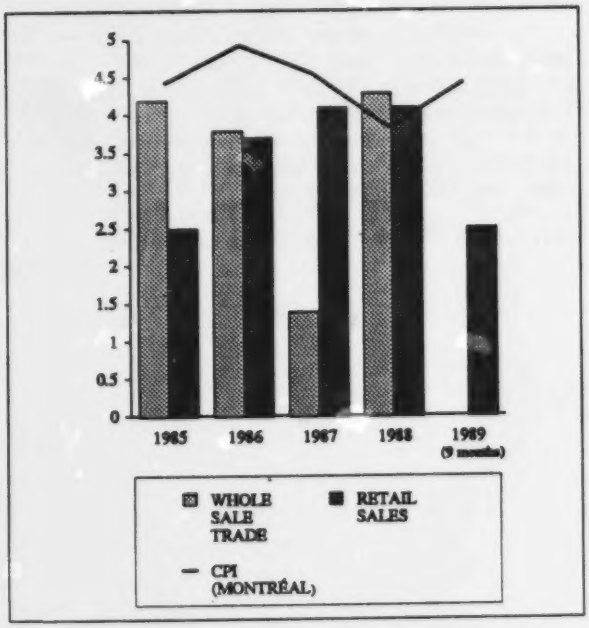


WAGES

Wage increases were very moderate in the Québec trade sector in 1989. The average hourly wage in the wholesale trade sector remained unchanged, and rose only 2.5% in the retail trade sector (first nine months of the year), compared with 6% in the manufacturing sector.

In 1989, weekly wage gains were appreciable in three sub-sectors. Two of them, in the wholesale trade sector, reflected increases in the corresponding manufacturing industries, i.e. clothing and knitted goods (up 15.5% in the first eight months of the year), and machinery and electrical equipment (up 15.4%). The third sub-sector, automobile accessories, part of the retail trade sector, posted a 15% upswing in weekly wages.

HOURLY EARNINGS IN THE TRADE SECTOR
QUÉBEC
ANNUAL PERCENTAGE CHANGES



LABOUR RELATIONS

Over the past three years, the number of person-days lost in labour disputes in Québec has levelled off in the wholesale trade sector, totalling just over 30 000 person-days. Fluctuations in the retail trade sector were more pronounced: 205 000 person-days were lost in 1987, compared with 90 000 in 1988, and 120 000 in 1989 (the 1986 average).

The most striking trend over the past five years has been the more protracted average length of labour disputes in the Québec trade sector. In 1985, the average strike or lock-out lasted 11 days; in 1986, 29 days; in 1987, 42 days; in 1988, 47 days; and in the first ten months of 1989, 58 days. The positive effect of economic expansion on the resources of the social partners probably explains this tendency to settle disputes less promptly.

In 1989, more than 18 700 workers in the Québec trade sector engaged in collective bargaining; by late October, less than 15% of them had resorted to strike action, unlike their counterparts in the retail trade sector, slightly more of whom went on strike.

Fewer than 500 collective agreements will expire in 1990, involving 22 000 workers, or 17.5% more than in 1989. The biggest collective agreement to be renegotiated will be that of the Société des Alcools, covering 3 000 employees.

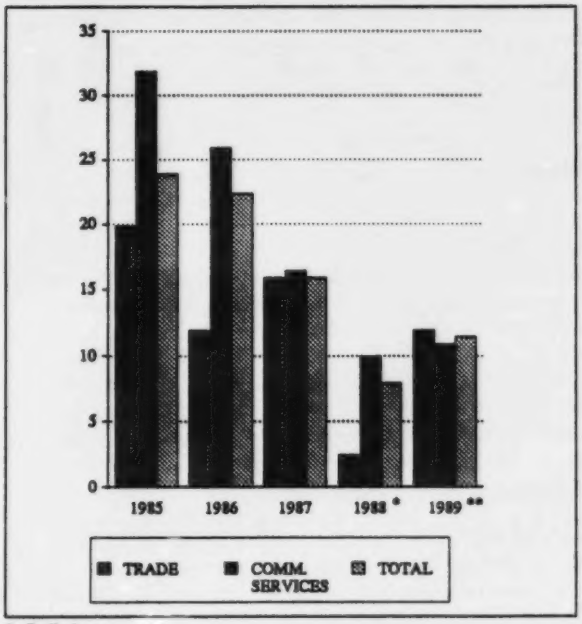
UTILIZATION OF OTHER FACTORS OF PRODUCTION

INVESTMENT

According to Statistics Canada mid-year forecasts, the exceptional growth rate in capital spending noted in 1987 (18.2%) in the Québec trade sector would not be equalled in 1989, although growth was sustained and clearly more vigorous than in 1988 (12.3% as against 2%). The $70 million increase in investment over 1988 was attributable almost entirely to the capital spending of department stores (up $25 million in 1989, more than 150% higher than in 1988), and retail outlets (up $40 million, a 17.2% rise over the preceding year).

Combined capital spending in the trade, commercial services and financial sectors raised capital spending by 8.8% in 1989, and 8.9% in 1989. The Québec/Canada capital spending ratio was stable in 1986 (21.2%), compared with 16.5% from 1979 to 1983. The most striking gains were

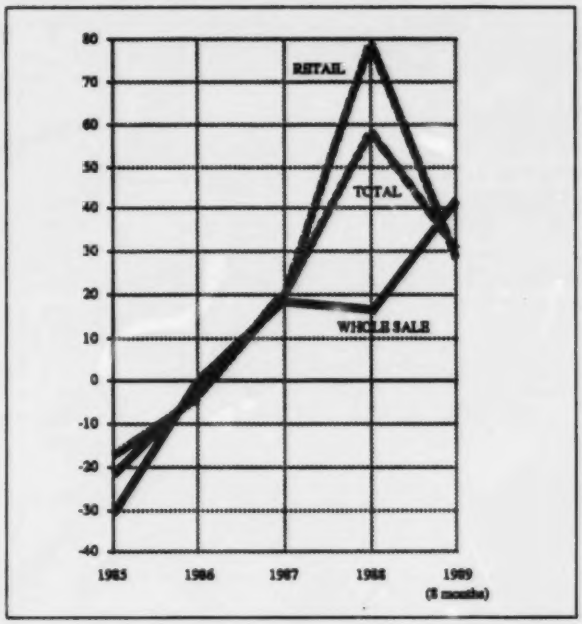
CAPITAL SPENDING
TRADE AND COMMERCIAL SERVICES
QUÉBEC
ANNUAL PERCENTAGE CHANGES



* Preliminary.

** Estimates revised at mid-year

LIABILITIES INVOLVED IN BANKRUPTCIES
TRADE SECTOR
QUÉBEC
ANNUAL PERCENTAGE CHANGES



recorded with regard to equipment (up 14.6% in 1989); construction posted slender gains of 1.5%.

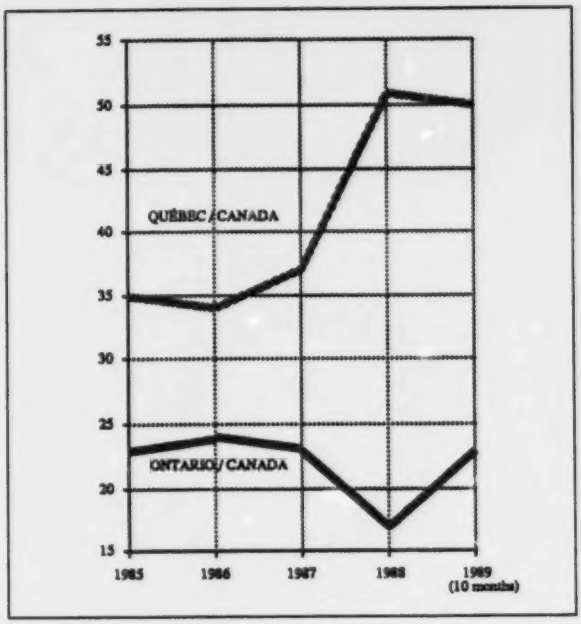
COMPETITIVENESS

PROFITS AND BANKRUPTCIES

Earnings in the Canadian trade sector dropped 0.7% in the third quarter of 1989, to $7.62 billion, due mainly to downturns in wholesale merchants' sales of lumber (-9.6%) and petroleum products (-7.1%). The situation in the retail trade sector was more favourable: earnings were up 2.3%, except for retail automobile sales (dwindling sales reduced earnings by 18.3%). Paradoxically, the earnings of automobile and car accessory wholesalers recorded a 10.7% gain.

Bankruptcies in the Québec trade sector reflect the trends noted in the manufacturing sector: there were 1 040 of them in the first ten months of 1989, a 7.2% increase. The attendant liabilities rose $33 million to $196 million, a 20.4% increase. At the same time, there were 2 180 bankruptcies in Canada as a whole, up 8% over the preceding year. Liabilities in Canada as a whole reached $392 million, 11.6% more than the year before.

LIABILITIES INVOLVED IN BANKRUPTCIES
TRADE SECTOR
QUÉBEC / CANADA AND ONTARIO / CANADA
(PERCENTAGE)



While the increase was less pronounced than in 1988, bankruptcies continued to rise for the third consecutive year. Business failures in the retail trade sector, while more numerous, grew less rapidly than in the wholesale trade sector. Bankruptcies in the retail trade sector were up 15% and 20%, respectively, in terms of numbers and the liabilities involved, as against increases of 20% and 26% in the wholesale trade sector. Total bankuptcies in the Québec trade sector accounted for 47.7% of all business failures in Canada; the liabilities accounted for 49.9% of the Canadian total.

ANALYSIS BY INDUSTRY GROUP

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DURABLE GOODS INDUSTRIES

WOOD

In late 1988, analysts stressed that the wood industry's sterling performance at the beginning of the year seemed more like a reprieve than a durable improvement. Heavy personal debt and high interest rates pointed to a drop in housing starts, with inevitable repercussions on the wood industry.

This diagnosis proved to be correct. Following 18% annual increases in 1986 and 1987, Québec wood shipments (in current dollars) slipped by 4% in 1988, despite brisk sales in the first six months. In the first three quarters of 1989, shipments rose a paltry 0.3% over the corresponding period in 1988, far below the inflation rate.

The growing strength of the Canadian dollar in relation to the U.S. dollar posed problems for the Québec wood industry on external markets. The exports-to-shipments ratio dropped from 32.4% in 1985 to 23.7% in the first half of 1989. Québec's share of the U.S. softwood lumber market decreased from 4.5% in 1986 to 3.3% in 1988, with little reason to believe that it went up in 1989. The 8% tax imposed on lumber exports to the United States made the American market much less profitable for Québec producers. The decline in wood exports was partially offset by an upswing in shipments to Ontario and overseas markets.

All other conventional indicators reflect a reversal of the upward trend in this industry group. The Canadian capacity utilization rate (96.2% in the fall of 1987 according to Statistics Canada) slid to 83.7% in the first half of 1989.

Investment has evolved according to the traditional pattern when a cycle shifts. As a result of economic expansion in Québec in 1986 and 1987, capital spending was up 79% in the province in 1988, although demand was tapering off. A correction was inevitable and, indeed, capital spending in the Québec wood industry plunged by 32.4% in 1989, when wood ranked last among all major industry groups in terms of investment. Capital spending totalled $229 million in the wood industry in 1988; in 1989, it should not go beyond $153 million.

Several major investment projects are noteworthy. These include the $63 million Lanofor plant built in Saint-Michel-des-Saints, and the $16 million Donohue Matane plans to spend modernizing its sawmills. Donohue has also invested $8 million in Comtois (Nord-du-Québec region) to upgrade its saw timber mill. Tembec has announced plans to alter the Temfor plant in Ville-Marie (Témiscamingue) to produce fibreboard using aspen veneer.

The purchase by paper mills of numerous sawmills is significantly changing the structure of the Québec lumber industry. To better ensure wood supplies, pulp and paper companies have bought shares in several sawmills, thus altering the relative weight of the pulp and paper industry and the saw timber industry with respect to the establishment of wood chip prices. Wood chip sales are an important source of income for independent sawmills. The effects of recent legislation respecting forestry (Bill 150) on the profitability of saw timber firms are now being felt. Stumpage fees have been increased and credits on the fees have been granted with respect to forest development work.

Renewed growth in the near future seems improbable unless a broad economic recovery occurs in the United States, the export tax is promptly removed and exchange rates improve. These conditions are not likely to be met.

FURNITURE

Furniture shipments in 1989 rose 9% (data for the first nine months of the year), satisfactory performance attributable to brisk sales at the beginning of the year. However, there were clear signs of a downturn in this industrial sector, especially at the end of the year. Dwindling output and plant and retail outlet closings were the order of the day. Capital spending reached $21.4 million in 1989, a mere 57% of 1987 figures. Sluggish investment coincided with strong pressure from imports, which more than doubled from 1985 to 1988.

Stiffer external competition went hand in hand with weak domestic demand. High interest rates and plunging housing starts appreciably dampened demand among Canadian consumers for furniture during the summer. Sales figures actually decreased in the fall. At the same time, exporters were hindered by the strong Canadian dollar with the result that exports to the U.S. dropped slightly in 1989.

Household furniture was hardest hit by the economic downturn. In addition, the upholstered furniture sub-group had to cope with stiff price increases for foam stuffing in 1989, which eroded profitability. Demand for office furniture on the Canadian market remained fairly firm; exports continued to grow.

Structurally, the Québec industry increasingly felt the effects of buyers' cooperatives in the furniture distribution sector, which favour dealing with a few big manufacturers offering diversified product lines; they also commonly buy in the United States. In Québec, in an industry made up of small businesses where for the past 15 years the Canadian capacity utilization rate has never exceeded 75%, no new impetus to merge is apparent among producers, following unprecedented numbers of acquisitions after 1982. Companies are aware of the need to regroup although they also realize that hasty mergers can, in some instances, reduce already shaky profitability. A good example of rational restructuring in 1989 was the purchase by Québec's leading furniture manufacturer (which exports half of its output to the United States) of the province's second biggest children's furniture manufacturer.

Furniture manufacturers in Montréal must prepare for the impending implementation of By-law 90 respecting air purification; provisions in the by-law covering paint rooms will require costly investments.

The industry's situation is not unremittingly bleak. More and more household furniture manufacturers have called upon industrial designers to enhance product variety and bolster exports, especially under the Accès-Design program. This trend is growing.

Among major capital spending projects the industry planned in 1989, mention should be made of the two-year modernization and computerization program launched by Shermag, worth $4.3 million and involving the company's head office in Sherbrooke and three plants, primarily the Disraeli and Saint-Jean-sur-Richelieu facilities. Meubles Norbec invested $1.4 million at its plant in the Laurentides region, and Meubles Fernand Bélanger invested $1 million in Saint-Léonard.

PRIMARY METALS

In the first nine months of 1989, the value of shipments in the Québec primary metal industry rose 3.1%. The upswing in industrial prices which began in 1988 continued in 1989. In constant dollars, shipments decreased by 0,6% in Québec, as well as in the rest of Canada. Inventories rose 21.4% (in constant dollars) partly as a consequence of high prices. The inventory-to-finished products ratio with regard to shipments in Canada climbed from 57% to 68%.

The Canadian capacity utilization rate, which has hovered between 95% and 98% since early 1988, spurred vigorous growth in capital spending. It reached $1.2 billion in Québec, an industry record, equivalent to a 71% increase

over 1988 figures, and 145% over 1987 spending. The primary metal industry alone accounted for nearly 47% of capital spending effected by the durable goods industries.

The highly favourable economic situation spawned an abundance of massive expansion projects in the Québec primary metal industry, especially in the aluminum sector. Five major aluminum smelter projects worth $4 billion were planned. Two of them involved increasing production capacity: Aluminerie Bécancour ($550 million), and Reynolds in Baie-Comeau ($500 million). The remaining three involved new plants: Alumax in Deschambault ($1 billion), Alouette in Sept-Iles ($1.1 billion), and Alcan in Laterrière ($750 million).

As a result, by 1992 Québec's annual aluminum production should exceed 2 million tons, equivalent to 14% of world output, and second only to that of the United States. To maximize economic spinoff in Québec of these major projects, the Ministère de l'Industrie, du Commerce et de la Technologie has established the Bureau des retombées de l'aluminium du Québec (BRAQ).

In 1989, Alcan achieved a major breakthrough in the production of an advanced material with high added value. The company is building the Dubuc plant in Jonquière, the first to engage in industrial scale production of Duralcan, a composite material with an aluminum matrix. With a capacity of 10 000 tons a year, the $35 million plant was slated to come on stream in late 1989. Duralcan will lead to several new applications for firms seeking new markets.

Three major investment projects were launched in the steel industry. In Montréal, Sidbec-Dosco earmarked $100 million for the modernization of its plant; the project was initiated in 1987 and is slated for completion in 1990. QIT-Fer et Titane is currently expanding its Sorel operations at a cost of $120 million. Stelco plans to invest an additional $10 million in its steel mill in Contrecoeur; it is also pursuing a $30 million modernization and expansion program implemented two years ago. The Bessemer consortium, officially established in late 1989, has for the past three years been developing new technologies related to the continuous casting of steel. Should the research program, spread over several years, succeed, the Canadian steel industry will appreciably enhance its competitiveness while developing exportable technological expertise.

In the magnesium sector, Norsk Hydro completed construction of its new plant in Bécancour, at an estimated cost of between $550 million and $600 million. The facility will produce 40 000 metric tons annually, and should begin operating in early 1990. It will make Québec one of the world's major magnesium producers. The metal is used primarily in alloys and is increasingly in demand in the automobile, embossing and aeronautics industries. The Institut national de la technologie du magnésium was set up recently to develop the manufacture of magnesium-based products.

In the Québec base metals industry (copper, zinc, precious metals), Noranda Inc. and Trelleborg AB, a Swedish firm, acquired Falconbridge in 1989. Although the scope of Falconbridge's Québec operations is very limited, it appears that the important Kidd Creek metallurgy complex in Timmins, Ontario, is a major client of most of Noranda Minerals' Québec plants. This acquisition should facilitate the restructuring and consolidation of Noranda's Québec operations.

Electrolytic Zinc of Canada in Valleyfield pursued its sweeping $120 million modernization program launched in late 1988 and slated for completion in 1990.

The Horne Division of Noranda Minerals plans to invest $16 million to enable it to directly inject concentrates in its copper foundry converters, part of a program to curb sulphur dioxide emissions. In Montréal-Est, the firm is upgrading its CCR plant; the $40 million project should be completed in 1993.

METAL FABRICATING

In 1989, growth in the Québec metal fabricating industry lagged behind that in the Québec and Canadian manufacturing sectors. During the first three quarters of the year, the value of shipments rose by only 3.4%, one-third the increase recorded for 1988 overall. In constant dollars, Québec shipments remained stable. The effect of the sharp downturn in the residential construction market was felt increasingly. The inventory-to-shipments ratio was fairly stable in 1988 and 1989. In Canada as a whole, the capacity utilization rate continued to climb, reaching 79.5% in the second half of 1989.

A wave of new investment initiated in 1987 lost momentum: capital spending dropped 7.4% to $102 million. This trend was widespread in Canada; the Québec/Canada capital spending ratio thus remained at a respectable 23.5%, as against 12.8% in 1985. Capital spending was still higher than in the early 1980s.

Québec will play an increasingly important role in the aluminum processing industry, provided it develops new markets and new processed products with high added value. To this end, the Québec government is encouraging Québec aluminum producers to examine the possibility of setting up an aluminum research and development institute. The Société générale de financement, which owns 25% of the Aluminerie de Bécancour and 20% of the Aluminerie Alouette, is seeking research projects which make it

possible to substantially increase the amount of aluminum processed in Québec.

New environmental standards which, in the short term, call for the replacement of over 30 000 metal storage tanks in service stations, are likely to put the industry at a disadvantage. For reasons of publicity, the major oil companies have decided to replace the metal tanks with fibreglass models, nearly all of which are manufactured in Ontario.

Proposed legislation respecting environmental certificates introduced by the Ministère de l'Environnement will, in the medium run, affect the competitiveness of firms operating in the metal fabricating surface treatment sector, in which several investment projects have been announced. Major projects include the opening of the Galvacor hot-immersion galvanizing plant in Québec City, worth $2.8 million, the Harricana Group (Metcoat Division) paint electroplating project in Drumondville ($5.5 million), and the Industries Pierre Fournelle aluminum anodic oxidation plant expansion project in Montréal ($2.5 million). Of special note is the construction by Sidbec-Dosco and Dofasco of a $50 million galvanizing plant in Montérégie.

Growth continued in the leaf metal sector, in which automation is becoming increasingly widespread. Rousseau Métal, Sani Métal, Benkelay, Produits Vulcain, RB Stamping and Continental Can planned major expansion projects.

Vigorous activity in the automobile industry, particularly the manufacture of auto parts, spurred the development of the metal fabricating industry.

MACHINERY

In the first nine months of 1989, Québec machinery shipments totalled $1.1 billion, a 10% jump over the preceding year, and one of the biggest increases in the Québec manufacturing sector. Job creation was up 11%; for the second consecutive year, this was the highest figure in Québec. Capital spending rose for the third consecutive year, and was up 12%. If planned investment projects are carried out, capital spending should exceed $180 million in 1989, 80% of it allocated to upgrading equipment and plant modernization. Capital spending in the machinery sector in Québec accounted for more than one-third of the Canadian total in the sector.

A number of major investment projects are under way, including those of Hymac Ltée in Laval ($5 million), Forano in Plessisville ($4.5 million), Venmar in Drummondville ($2.8 million), and Couture de Trois-Rivières and Robot-Concept in Lanoraie ($2 million each).

Once again in 1989, the capacity utilization rate in the machinery industry peaked; at roughly 76%, it stood six percentage points higher than in 1986.

Book orders were up 9.5% in the first eight months of 1989, as against 25% in 1988. New orders were down 8% in the first three quarters of 1989, compared with a 17% increase in the same period the preceding year. These figures may indicate sluggish demand throughout 1990.

The implementation of new production techniques, e.g. CAD/CAM, machine tools, numeric-controlled machines, computerized management and so on, has, since the mid-1980s, enabled several Québec manufacturers to consolidate their position and simultaneously boost productivity and product quality. This is especially true in the hydraulic jack sector, where Québec ranks first with output worth roughly $40 million. However, computerization and automation are still not widespread in many businesses. Strong demand for high-end equipment should encourage the Québec packing and labeling industries to quickly adopt a technology better adapted to the demands of a highly competitive market. Widespread public concerns about the environment suggest that the environmental protection equipment industry should enjoy growth ranging from 15% to 20% in the coming years.

TRANSPORTATION EQUIPMENT

Shipments in the Québec transportation industry climbed 12.9% in the first nine months of 1989, due by and large to the commencement of production at the Hyundai plant in Bromont and greater demand in the aeronautics industry. From 1985 to 1989, annual growth in shipments in the Québec transportation industry was less dramatic, i.e. 6.5%, though it compared well with the 4.6% growth in Canada as a whole. The order books of the aeronautics industry are full for 1990 and 1991. The Canadian inventory-to-shipments ratio dropped slightly for the second consecutive year.

The Canadian capacity utilization rate also slid, from 71.5% in 1988 to 68.4% in the first half of 1989. It had already fallen considerably in the preceding years in the wake of substantial investments which appreciably expanded industry capacity. In 1989, capital spending declined by 7.3%, although the $450 million invested was the second highest figure in the past 10 years. The Canadian transportation industry recorded a drop of only 1.6%, which reduced to 15.9% Québec's share of overall Canadian investment in 1989, as against 16.9% in 1988.

Prospects in the aeronautics sector are excellent. Encouraged by vigorous markets, Pratt & Whitney launched a

$300 million expansion and modernization program at its facilities on the south shore of Montréal. Bombardier has given Canadair the go-ahead to build a jet aircraft designed for regional carriers, involving $275 million in investments over three years. Moreover, Bombardier purchased Shorts Brothers, the Irish aircraft manufacturer. The Montréal firm now has a foothold in the unified European market of 1992 and has also eliminated a competitor on the regional jet market. General Electric is investing $40 million at its Bromont plant to increase capacity for the production of aircraft engine blades.

In the automobile industry, capital spending was especially brisk in the parts manufacturing sector. Hyundai, a Korean firm, announced the construction of a $120 million parts stamping plant in Bromont. Phase two of the aluminum parts plant announced in July 1988 by Montupet, a French firm, in Rivière-Beaudette, worth $112 million, will be launched in the spring of 1990.

Prospects in the mass transit equipment and shipbuilding sectors in Québec are less encouraging and depend by and large on several major government contracts which have yet to be granted. The pleasure boat industry entered a slump which should persist until 1991, although Cadorette Marine in Grand-Mère initiated a $2.5 million expansion and modernization project.

General Electric will invest $25 million over four years in the locomotive plant it bought recently from Bombardier. The appreciation of the Canadian dollar and the elimination of customs tariffs between the United States and Canada within three years could exacerbate the problems encountered in recent years by part and component manufacturers.

ELECTRICAL AND ELECTRONIC PRODUCTS

For the third consecutive year, the Québec electrical and electronic products industry enjoyed vigorous growth: the value of shipments in the first three quarters of 1989 rose 19%, compared with 7% in the Canadian industry overall, and 4% in the Québec manufacturing sector. Brisk exports by Québec electronic products manufacturers were largely responsible for this performance. Growth in the electrical products sector was rather modest, in particular because of sluggish demand in the wake of waning residential construction. However, the value of shipments in the wire and cable sub-sector rose appreciably, because of strong exports and higher aluminum and copper prices.

The industry was booming in 1989. For the second consecutive year, the Canadian capacity utilization rate reached over 95% and the inventory-to-shipments ratio continued to decline. Capital spending proceeded apace, totalling $225 million.

Investment was particularly ambitious in the electronic products sector. In 1989 and 1990, IBM is to invest $135 million to upgrade production equipment and quality control. Circo Craft launched a three-year, $40 million investment program to expand its production facilities and enhance product development. Phillips has concentrated worldwide microcomputer production at its Saint-Laurent plant; in 1988 it undertook a three-year, $50 million investment program. Northern Telecom completed a $60 million investment program to expand and modernize its Saint-Laurent plant. Leviton allocated $8 million to the construction of a wiring accessories and telephone system component plant in Sherbrooke.

Capital spending in the electrical products sector was generally less extensive, except for a $30 million investment project initiated by Camco (51% of which is owned by General Electric Canada) at its Montréal household appliance plant. York Lighting also allocated $8 million to relocate and expand its Montréal production facilities.

These investments are closely tied to attempts to streamline the industry in North America and elsewhere. The strategy employed includes the sale and purchase of companies, plant closings, the establishment of strategic alliances, and the granting of North American or international manufacturing mandates. Among noteworthy takeovers are the following: the purchase of the U.S. firm Link by CAE; the purchase by the American company Electropak of Hylogic and Pulsar, two small Québec microelectronics firms; and the purchase by Asea Brown Boveri of Westinghouse's electric transformer division. In Montréal, General Electric Canada closed its electric light bulb factory; Unisys shut down its power supply unit plant; and Leviton halted production at its electrical equipment factory.

The strength of the Canadian dollar and slackening demand will dampen sales of Québec electrical and electronic products in the short and medium terms, especially in the household appliance sector and the construction products sector, given that investment in the residential, commercial and industrial sectors is expected to level off. Computer equipment manufacturers expect weak demand in 1990, especially if the general economic slowdown persists. Military equipment manufacturers will have to tailor their development strategies to the growing climate of détente now developing in the world. A number of firms will stress civilian applications of military technologies. Diversification will focus in particular on the space sector, where major projects such as Radarsat, Msat and the U.S.

orbital station will spur the industry's development in the coming years.

NON-METALLIC MINERAL PRODUCTS

In response to the downturn in housing starts, the Québec non-metallic mineral products industry had to trim staff: in the first three quarters of 1989, the number of wage earners declined by 6%, compared with 2.5% in the Canadian industry overall. However, the Canadian inventory-to-shipments ratio went from 42% to 37%.

The capacity utilization rate reached a peak in the first quarter of 1989, then dipped slightly to 72.7% in the second quarter.

In light of such a rather uninspiring conjunctural situation, capital spending in the industry was remarkable in 1989. In terms of construction and machinery and equipment, spending hit all-time highs, totalling $240 million, a 126% increase over the preceding year. As a result, the Québec/Canada capital spending ratio jumped to 35.6%, a 20-year record.

Major investment projects already under way or announced accounted for increased capital spending. In the glass sector, the Belgian firm Glaverbel S.A. began construction of a $140 million flat glass factory in Saint-Augustin-de-Desmaures; Lamiver will build a $6 million safety glass manufacturing facility in Pointe-aux-Trembles. Ganirex is building an $18 million granite tile plant in Thetford Mines; Tulinor is building a $4.5 million factory in Grandes-Bergeronnes. Dolo-Mines will invest roughly $2.5 million in a limestone plant in Abitibi. Graybec will invest more than $13 million to double the production capacity of its limestone plant in the Estrie region and has earmarked $1.3 million for plant modernization in Joliette.

The commencement of operations at Alcan's new Dubuc plant in Jonquière should give a boost to the silicon carbide industry, which has been slowing down for several years. Duralcan, a new composite material manufactured in this plant, may contain up to 30% silicon carbide.

NON-DURABLE GOODS INDUSTRIES

FOOD AND BEVERAGES

In 1989, the Québec food industry failed, for the third consecutive year, to keep pace with the rest of the manufacturing sector. Average annual growth in shipments (by value) from 1985 to 1988 was a scant 3.7%. During the first nine months of 1989, food shipments fell by 2.3% in relation to the same period the preceding year, while those in Canada as a whole increased by 0.2%. Slower growth in Canadian food production sparked a slight decrease in the finished products inventory-to-shipments ratio in Canada during the first three quarters of 1989.

Contrary to the food industry in 1989, growth in the Québec beverages industry outstripped that in the manufacturing sector for the third time in four years. Between 1985 and 1988, the value of shipments rose by an average annual rate of 6.7%. In the first nine months of 1989, shipments were up 8.7% over the same period in 1988, while those in the Canadian food industry overall climbed only 2.7%. The slower growth in beverage production outside Québec caused a slight increase in the finished product inventory-to-shipments ratio in Canada in the first three quarters of 1989.

Capital spending in the Canadian food and beverages sectors rose nearly 13% in 1989; in Québec, such spending remained at 1988 levels (down 0.3%). Québec's relative share of capital spending in Canada as a whole dropped from 25.1% in 1988 to 22.2% in 1989. Investment stability in the Québec food and beverages sector in 1989 contrasts with the 38% upswing in capital spending recorded in the Québec manufacturing sector. However, it should be noted that investments in 1988 and 1989 did reach record levels in the Québec food and beverages industry.

Among major projects under way or announced in 1989, mention should be made of the replacement of the Weston plant in Longueuil, a $47 million investment in the bakery sector. Provigo and Hudon et Deaudelin invested $20 million and $14 million, respectively, in new food distribution centres. In August, Steinberg announced an $80 million investment in the food sector in Québec, to be spread over two or three years.

The brewery sub-sector accounted in 1989 for major investment projects in the beverages sector, following the merger of the Molson and O'Keefe breweries. Under an $80 million investment program, spread over three years, Molson will increase the production capacity of its Boucherville brewery by 40%, a move made necessary by the closing in 1992 of the O'Keefe plant. Labatt announced projects worth $90 million during the same period designed to expand by 10% the capacity of the company's LaSalle brewery.

TOBACCO

Streamlining in the tobacco industry moved ahead throughout 1989. Employment continued to decline although

shipments rose 11% in the first three quarters, as a result of brisker exports, which quadrupled between 1985 and 1988. However, the increase in exports recorded in 1989 was more modest. The situation on the Canadian and Québec markets is well known; the industry claims that cigarette consumption has fallen by 23% since 1981. Stringent antitobacco legislation restricting smoking to designated areas and prohibiting advertising and, above all, a sharp increase in the federal tax have led experts to predict a new decrease in cigarette consumption of between 7% and 9% in 1989.

The Rothmans plant closing in Montréal, slated for the spring of 1990, shows the inevitable consequences of this situation on production. The Canadian capacity utilization rate remained very low, i.e. 66.4%, despite a slight upturn over the preceding two years; the figure exceeded 90% in 1981 and 1982. Ongoing rationalization, reflected by the Rothmans plant closing, should push this indicator up.

According to forecasts at the beginning of the year, investment was expected to decline by 7.9% in 1989, the third decrease in four years. Since the restructuring and modernization of the Canadian tobacco industry began in 1983, Québec accounted for an annual average of 80% of capital spending in the sector (1983-1988). In 1989, this figure fell to 50%, the long-run historical average. Imperial Tobacco planned to invest $5 million to move its cigar plant from Montréal to Joliette.

RUBBER PRODUCTS

The principal economic indicators seem to point to a revival in the rubber products industry. For four years Canadian shipments stagnated (in constant dollars) and actually regressed 3.5% in constant terms; in the first three quarters of 1989, they rose 12%. The rubber products industry is one of the few groups to post an upturn in its capacity utilization rate, which climbed from 70% in 1988 to 74% at the end of the first half of 1989. Imports jumped considerably because of heavy demand for long-wearing radial tires, which domestic producers cannot fully satisfy. The trend toward higher inventories begun in 1988 continued in 1989; as a result, the Canadian inventory-to-shipments ratio nudged upward in 1988, but levelled off in 1989.

Capital spending in the rubber and plastics products industry surged ahead by 50% in 1989. Investment in recent years has been volatile, although expenditures in Québec in comparison with Canada as a whole have been fairly stable since 1982, i.e. roughly 19%, and 1989 was no exception. It should be noted that heavy capital spending was due essentially to the $85 million Firestone (Bridgestone) plant modernization project in Joliette, to enable the company to manufacture mid-size car and light truck tires. Some 80 jobs will be created as a result. Part of the plant's output is apparently destined for the GM plant in Boisbriand. The Joliette plant is also under contract to deliver tires for Montréal subway cars. Following Bridgestone's acquisition of Firestone, the Joliette plant will be equipped with Japanese automation and robotization equipment.

The Canadian tire industry has experienced a period of massive investment spawned by the need to streamline production throughout North America. Canada is the big winner, especially because of the customs duty rebate program introduced by Ottawa in 1986. The program was designed to encourage specialization in the plants of firms operating in Canada and the United States by allowing duty-free trade in this area.

Prospects for 1990 remain uncertain: the industry is closely tied to automobile sales and industrial production and could well suffer a setback if the economy falters. In the short term, growth in production should be slow. Long-term forecasts are more promising because of Firestone's current and anticipated investments in Joliette and those of Goodyear in Valleyfield, and developments in the Québec industrial rubber products sub-sector.

PLASTICS PRODUCTS

As was the case in the manufacturing sector overall, the picture in the Québec plastics products industry was less bright in 1989 than in 1988. In the first three quarters of 1989, shipments rose 4% over the same period the preceding year, in contrast to an average annual rate of 10% in the three previous years. Remarkably, for the first time since 1986, growth in production in the industry did not outstrip that of the manufacturing sector overall. Changes in the capacity utilization rate reflected the general downturn. In 1985, the industry was operating at near peak capacity; since then, the capacity utilization rate has plunged 14 percentage points. The drops noted in 1988 and 1989 were especially steep. Exports also flagged after several years of vigorous growth. In the wake of price increases for resins in recent years, the relative share of the cost of raw materials in overall costs increased in 1989; profit margins before and after taxes waned.

Several relatively important investment projects are noteworthy and serve as a reminder that prospects are still good in the sector. Among expansion and modernization projects, mention should be made of those of FRE Composites in Lachute ($6.6 million), Tilco in Saint-Jean-sur-Richelieu ($3 million), Boflex in Saint-Hilaire ($1.1 million), Vinyform in Laval ($0.5 million), and Tucker in Coaticook ($0.5 million). The following firms launched

plant construction projects: Z.C.L. Canada in Drummondville ($3.2 million), Licaplast Industrie Emballage in Saint- Laurent ($2.5 million), C-Test Development in Gatineau ($2.5 million), and Bromar Plastics in Anjou ($0.6 million). Investment has been unfailingly steady in recent years. This trend will persist over the next two years and could accelerate because of equipment modernization programs. Increasingly, the industry will rely on faster, computer-controlled machines connected to automatic control systems. The use of new mould fabricating techniques and CAD/CAM systems will become more widespread. To better position themselves on markets, manufacturers in Québec and elsewhere will engage in mergers and acquisitions in the coming years.

The future looks bright for the industry: manufacturers continue to replace conventional materials with plastic. The transportation equipment parts and construction markets should continue to expand rapidly. However, growing environmental concerns cast a shadow over growth prospects for plastics products, especially in the field of packaging. Industrialists' success in this domain is tied to research and development by resin producers. If the latter respond to environmental concerns and develop biodegradable or easily recyclable resins, industry prospects will improve.

LEATHER

Québec leather shipments rose slightly in 1987 (2.6%) and 1988 (1.3%), then fell by 3.7% in the first three quarters of 1989, compared with a 0.5% decline in Canadian shipments during the same period. The inventory-to-shipments ratio climbed from 77% in 1988 to 81% in 1989, but fell short of the 1986 figure (92%). Manufacturers' reluctance to carry heavier inventories can be explained, in part, by sluggish sales over the past two years, the result of fairly mild winters. In 1989, the slight upturn in Canadian inventories made it necessary to use more production capacity. The capacity utilization rate was still less than 80%, though, a rare occurence in the last 20 years.

The overall economic situation in the sector is hardly conducive to new investment, which declined 13% in 1989 over 1988, when it fell 23% below 1987 levels. The exception was tanned leather, which benefited from higher world prices. Les Tanneries J.F.C. plans to invest $5 million in the Bas-Saint-Laurent region by 1991-1992. Between 1978 and 1982, the average annual Québec/Canada capital spending ratio was 28.3%. In the course of the next five years (1983-1987), the figure plummeted to 17%. Some progress was noted in 1988 and 1989, when the Québec/Canada ratio reached 25.1% and 23.7%, respectively.

The industry is experiencing structural problems. Leather firms are having difficulty adjusting to increased international competition, the trade balance continued to show a sizable deficit, and their task was not made any easier when the remaining import quotas were lifted in 1988. A restructuring process is under way. The Taurus group closed one plant in Montérégie and another in the Estrie region. The company also sold its C.D.R. plant in the Estrie region to the facility's managers, and sold its Loretteville plant to another manufacturing group. At the end of the year, Bastien shoes halted operations. G.A. Goulet in Saint-Tite carried out a $1.2 million plant modernization project. At present, the work and athletic shoe markets are the most dynamic. The closing in April of the Footwear and Leather Institute of Canada and the Centre québécois de haute technologie de la chaussure will hardly facilitate the sector's long-term adjustment. Stiffer competition will lead to plant closures, but also to the modernization and consolidation of production facilities.

Ottawa is investigating complaints from the Shoe Manufacturers' Association of Canada to determine whether women's shoes imported from Brazil, China, Taiwan, Poland, Roumania and Yugoslavia are adversely affecting Canadian producers because they are subject to unfair trade practices such as dumping and subsidies. Revenue Canada will reach a preliminary decision in January 1990 concerning the temporary imposition of antidumping or countervailing duties. The Canadian International Trade Tribunal will hand down a final decision in the spring of 1990.

PRIMARY TEXTILES AND TEXTILE PRODUCTS

After recording appreciable gains in 1986, 1987 and 1988, textile industry shipments fell by 1.9%, but rose 0.6% in Canada as a whole, in the first nine months of 1989. This stagnation was accompanied by higher inventories and a slight dip in Canadian capacity utilization.

Capital spending in the Québec textile industry was remarkably buoyant; it shot up 24% in 1989 in comparison with 1988, and accounted for 34% of total Canadian investment in the sector, the average figure in recent years. It nonetheless heralded a marked downturn from the period 1979-1982, when Québec's share reached 50%.

A number of major investment projects were undertaken. Hafner Fabrics in Granby allocated $31 million to specializing in furniture and decorative fabrics. In Drummondville, Dominion Textile is to invest $34 million to modernize its denim mills. Also in Drummondville,

Armkem is expanding its technological textiles plant at a cost of $10 million. Satextil launched an $8.5 million plant modernization project in Grand-Mère. In Saint-Léonard, Jemdye implemented a $5 million program to purchase new, specialized fabric finishing equipment. Nalpac pursued its knitted fabric expansion program in Montréal, at a cost of $12 million.

In February 1989, Dominion Textile announced 425 layoffs, as a result of the erosion of its share of the light fabric market. The company claims that is has lost market share because of competing imports from countries with low production costs, encouraged by a customs duty rebate program. At the same time, the company announced that it intended to specialize in industrial yarns, heavy fabrics and fabric finishing. This streamlining program has only been partially completed as the federal government has not yet decided whether it will speed up tariff reductions on textiles granted under the Free Trade Agreement, and whether duties on textiles will be brought into line with those prevailing in the United States and the EEC. Ottawa should reach a decision in the coming months, thus eliminating a source of uncertainty which is detrimental to investment. The federal textile tariff reduction program is designed to bolster the competitiveness of the clothing industry under the FTA.

Strategies for adapting to the FTA, given the initial rules inherent in the Agreement, have spawned numerous investment proposals in certain sectors of the textile industry, e.g. industrial yarns, denim, non-woven and industrial fabrics, and technological textiles. Mention should be made of the specialization of Québec carpet factories and the acquisition of foreign plants. The accelerated introduction of CAD/CAM and numeric-controlled systems will make it necessary to adjust the qualitative structure of manpower.

The medium- and long-term outlook for the industry continues to be uncertain. The trade balance deficit remained high in 1989, Québec's share of the Canadian industry's capital spending is low, and reservations have been expressed about various facets of the federal tariff reduction program.

CLOTHING

Canadian and Québec clothing industry shipments were robust in 1986 and 1987, although they faltered in 1988 (up 0.4% in Canada, down 0.2% in Québec). In the first nine months of 1989, Québec shipments rose 2.8%, despite a 15% drop in exports. Shipments in Canada as a whole climbed 5%; at the same time, the inventory-to-shipments ratio decreased slightly, and the capacity utilization rate increased marginally. Although the overall situation in the industry was favourable, the performance of the fur sub-sector was unremarkable, the result of lower prices for fur coats, partly in response to relatively mild winters in recent years, and an anti-fur campaign which curbed demand for these products in the EEC.

Investment in the clothing industry rose 14.1% in 1989; because of the generally favourable economic climate, Québec's share of overall Canadian capital spending in the sector reached 63.2%, compared with 39% between 1979 and 1982. Two projects stand out from numerous modest ones: Lingerie Hamilton invested $8.5 million; Industries Majestic and Tricot Caramy allocated $7 million to the construction of new facilities in Montréal.

The trade balance deficit remained high, but bilateral quotas negotiated under the Multifibre Agreement will foster medium-term stability in the domestic clothing industry. Moreover, the possible implementation of the final phase of the federal textile tariff reduction program, involving accelerated tariff reductions on textiles under the Free Trade Agreement and bringing duties on these products into line with those prevailing in the United States and the EEC, should bolster competitiveness by enhancing profitability and reinvestment. However, long-term prospects are still uncertain. During the current round of GATT negotiations, discussions have focused on the gradual elimination of bilateral agreements to restrict imports from countries with low production costs. Should this occur, the industry will have to quickly shift to the production of highly distinctive or specialized clothing. The opening of the U.S. market in the wake of the Free Trade Agreement may facilitate the industry's adjustment to the globalization of markets. A number of leaders in the Québec industry have tailored their development in this perspective, and have expanded and modernized their facilities. Some of the firms have opened showrooms in the United States and even purchased American plants to gain a foothold in distribution networks.

More and more companies are banking on talented designers to produce distinctive, original garments, to secure their position on the Canadian market and make inroads in the U.S.

PAPER

The year 1989 marked the end of a remarkable boom in the paper industry.

Between 1983, a disastrous year, and 1988, Québec paper shipments increased at an average annual rate of 9.6% in

constant dollars, a striking figure which largely exceeded the inflation rate. In 1988, the first signs of a slowdown in demand became apparent. For the first time in six years, Québec shipments in constant dollars dropped by 1.3%, although a 9.5% price rise offset the effects of this lull. Capacity utilization rates were very high. In late 1988, the Canadian Pulp and Paper Association announced rates of 96% (paper pulp), 99% (newsprint), and from 99% to 89% for other types of paper and cardboard.

Two symptomatic changes highlighted the slowdown in the paper industry in 1989. In the second half of the year, shipments continued to dwindle, especially those of newsprint. No price increases offset the reduction in shipments; official prices were discounted by up to 20%. The appreciation of the Canadian dollar squeezed profits; the industry sells much of its output in the United States.

Optimism in 1988 spawned a wave of major investment projects in 1989. By mid-year, capital spending on paper mills was estimated at more than $1.7 billion. By way of comparison, average annual expenditures between 1980 and 1984 ran to $440 million (current dollars). The optimism prevalent in the paper industry played a pivotal role in the Québec manufacturing sector: investments by the paper industry accounted for more than 50% of capital spending in the non-durable goods sector in 1989.

However, the Québec industry did not take the lead in terms of investment. Between 1987 and 1989, capital spending increased elsewhere in Canada by a factor of 3.4; in Québec, the corresponding figure is only 1.7. The Québec/Canada capital spending ratio dropped from 52.6% in 1986 to 28.8% in 1988; it is expected to reach 30.9% in 1989. Several new paper mills built in the western provinces, especially Alberta, explain this trend.

The general climate prevailing at the end of the cycle in the paper industry affected in particular the newsprint industry. Demand remained high for commercial chemical pulp and fine papers.

Historically, Québec newsprint dominated the market in the northeastern United States until the 1950s. Even today, it is a key sector in the Québec paper industry. Prospects are dim for this product, because of the economic situation, and for structural reasons.

Demand for newsprint is highly sensitive to economic fluctuations. Prospects for a soft landing in the United States and Canada suggest waning demand. Reduced spending on advertising in the U.S. has affected sales, at a time when five new newsprint plants increased production capacity on the continent by 6.8%. In the first five months of 1989, Canadian shipments south of the border fell 4.8%, while domestic shipments dropped 4.3%, a trend which persisted in the second half of the year. At the same time, inventories continued to pile up. This situation could be crucial in 1990 when collective agreements are renegotiated. The Canadian Paperworkers Union intends to seek for its members its share of the paper industry's exceptional profits in recent years; management will be unyielding because of the reversal of the economic situation.

The Québec newsprint industry must contemplate structural changes and tailor production to legislation adopted in the American states which consume large quantities of newsprint, under which newspaper publishers must use a significant proportion of recycled newsprint. Under the circumstances, considerable uncertainty arises because the raw material for recycled newsprint does not come from Québec forests, but from major urban centres in the U.S. Several paper companies operating in Québec are now planning to set up newspaper de-inking plants, although the projects are only at the feasibility study stage.

It is still too soon to assess the long-term impact of American legislation on the Québec newsprint industry. At present, the Quebec and Ontario Paper Company in Thorold, Ontario is the only recycled newsprint plant in Canada. Cascades, Domtar, Donohue, Daishowa, Kruger, Canadian Pacific Forest Products and MacLaren have announced small-scale de-inking and recycled paper and cardboard plants. The only major newspaper recycling construction project is located in Ontario, where Atlantic Packaging is building a $200 million facility.

Numerous capital spending projects were announced or under way in 1989.

Cascades made public a $53 million program at its East Angus cardboard factory, involving plant expansion and de-inking equipment purchases. The company also invested $25 million to install a third tissue paper machine in Kingsey Falls.

MDF Uniboard, a subsidiary of the German Kunz group which manufactures particle board and panels, announced a $117 million investment program, of which $80 million has been allocated to the construction of a decorative paper plant in Drummondville.

Scott Paper will invest $36 million to build a de-inking plant in Crabtree. The group is also to invest $100 million in the construction of a chemical-thermomechanical pulp plant in the Joliette region, which will supply paper pulp to the company's Québec and U.S. facilities.

Canadian Pacific Forest Products has launched five major projects, worth $118 million, at its La Tuque pulp mill; it has also earmarked $32 million for the modernization of

its facilities in Gatineau, and $12 million for other plants in Québec.

Abitibi-Price is spending $44 million in Alma to modernize its plant and install a boiler.

Tembec is investing $270 million in Témiscaming to build a cardboard plant.

The Quebec and Ontario Paper Company has allocated $130 million to its thermomechanical pulp mill in Baie-Comeau.

The following firms are completing projects: Kruger in Trois-Rivières ($400 million), Donohue Matane in Matane ($317 million), Consolidated Bathurst in Grand-Mère ($280 million) and Shawinigan ($57 million), MacLaren in Thurso ($168 million), Daishowa in Québec City ($125 million), and Gaspesia in Chandler ($113 million). Domtar has completed a $1.2 billion investment project in Windsor.

PRINTING AND PUBLISHING

Growth in the Québec printing and publishing industry levelled off in 1989. Shipments increased by 3.2% in the first nine months of the year, a 2.4% drop in constant dollars. Between 1986 and 1988, the sector enjoyed an annual growth rate of 8%. The downturn in shipments for Canada as a whole is less pronounced: in 1989, they were up 6.3%, compared with an annual growth rate of slightly more than 9% during the period 1986-1988. Brisk domestic demand, a driving force in the growth noted in recent years, slackened in 1989 and forecasters predict that this trend will persist in 1990.

Capital spending has followed a saw-toothed pattern in recent years; it fell 1.9% in 1989, and Québec's share of overall Canadian expenditures plunged from 26.2% to 16.5%, a record since 1982. Since 1983, the average had been over 25%. This is significant in an industry which must constantly invest in equipment to remain competitive. Two projects are noteworthy: Jeux de cartes Graphica invested $2.2 million to expand its Sherbrooke plant and install new equipment, and Imprimerie Gagné allocated $8 million to an expansion project in Louiseville. A number of major equipment purchases could be undertaken in 1990. Rapid technological change has considerably curtailed the useful life of equipment in recent years.

Other economic indicators point to a slowdown in the printing and publishing industry. The capacity utilization rate fell below 90%, its first significant drop since 1986. Liabilities related to bankruptcies began rising in 1987, and increased considerably in 1989. Several important acquisitions affected the industry, particularly in the commercial form printing sector: the Japanese firm Settsu bought Formules d'affaires Drummond et Crain; Southam Paragon acquired ABF Formules. The Quebecor group bought Maxwell Graphics, the American subsidiary of the Maxwell Group, for US$500 million, thus making it the second biggest printer in North America. Maxwell Graphics owns 15 printing plants in the U.S. Last year, Quebecor purchased the facilities of Ronalds Federated, then owned by BCE.

The impact of more widespread use of desktop publishing has been most readily apparent until now in the electrotyping-composition-binding phase, especially in terms of manpower. Demand for large, high-quality printing jobs continues to grow. Printers are best suited to perform this work as client firms do not have the resources to carry it out themselves.

REFINED PETROLEUM AND COAL PRODUCTS

Demand for petroleum products increased in 1989. Fuel oil sales virtually doubled in volume in relation to 1988 figures, because a surplus electricity sales program in the industrial sector was terminated. Sales of motor fuel, gasoline and diesel fuel were up 4.5%. The hard times of the first half of the 1980s, caused by the closing of four refineries in Montréal, are now in the past. The improved market conditions which followed the collapse of international crude oil prices have revived this sector in Québec. The industry's market is mainly local. Strong demand for refined products gave a boost to imports of inputs. Exports declined, but the equilibrium between domestic production and the local market did not change.

Investment in the Québec industry reached a record $203 million in 1989, a 100% increase over the preceding year, and 25% of total capital spending in the Canadian sector overall. As a result, Québec refineries achieved greater flexibility in processing crude oil, improved quality control, and enhanced the quality of their petroleum products. Moreover, the industry will be able to meet the December 1, 1990 deadline, when the use of non-leaded fuel in cars becomes compulsory. At present, it can offer Québec consumers a gasoline equivalent to leaded fuel which meets environmental standards. An improvement in the capacity utilization rate, steady demand, especially for light fuel oil and high-octane gasoline, are all incentives to invest. The same is true of the Québec government's advantageous fiscal measures, such as the gradual elimination by 1993 of the special 1% tax on capital and the related tax exemption program.

The recent purchase by Esso of Texaco's assets has led to a restructuring of the Québec industry. Following a decision handed down by the Competition Tribunal of Canada, Esso will, in the near future, sell some of its assets in Québec to other companies.

CHEMICAL PRODUCTS

The value of shipments in the chemical products industry rose 5.4% in the first nine months of 1989, compared with 1.7% in Canada as a whole over the same period, and 3.9% in the Québec manufacturing sector. However, when compared with the 10% increase recorded in 1988, this figure indicates a slowdown. Higher industrial prices explain by and large growth in shipments; in constant dollars, the latter climbed by only 1.5%. The inventory-to-shipments ratio averaged 74% in early 1989, as against 69% in 1988. By mid-year, the capacity utilization rate reached 94.1%. Some 28 000 people were employed by the chemical products industry, an 8% increase over 1988.

Favourable conditions in the industry prompted widespread investment. Forecasts revised in mid-year predicted that capital spending would total $550 million, up nearly 50% over 1988. These investments accounted for one-third of overall capital spending in the Canadian chemical products industry; Québec's share of all Canadian shipments reached 22%.

Business was brisk in the inorganic chemistry sector, despite the dampening effect of the general economic downturn. Production of sodium chlorate and hydrogen peroxide enjoyed vigorous growth because of heavy demand for these products in the pulp and paper industry where they are used increasingly as pulp bleaching agents. Several investment projects were announced or are under way. Albright & Wilson launched a chlorate plant modernization program in Buckingham worth $40 million in 1989-1990; Alby Chlorate is spending $30 million in Valleyfield. Noranda is building a $160 million sulphuric acid plant, and Tioxyde Canada announced a $50 million titanium dioxide plant modernization project.

The petrochemical industries involving organic synthesis and recycling of waste oil recorded sustained growth. The gradual reduction of customs tariffs under the Free Trade Agreement boosted exports and spurred local firms to modernize and expand production facilities to enhance competitiveness. Several investment projects were announced or are under way. Among the most important are Pétromont's $155 million project involving the expansion and modernization of its ethylene and polyethylene plants, and a $35 million high-technology polymer plant to be built by Himont Canada Inc. Kemtec has just completed a $110 million paraxylene plant. The recent announcement by Soligaz of a $410 million project clears the way for major expansion of the Québec petrochemical industry in the 1990s. Under the project, liquid natural gas from western Canada and international markets will be transported by pipeline, stored and separated in the Montréal region. The construction of a $200 million MTBE (methyl tertiary butylic ether) plant, slated to open in 1992, is the first example of extensive spinoff from the Soligaz project.

The Québec pharmaceutical sector continued to benefit from the industry's commitment to invest $14 billion in R & D in Canada by 1996. Several projects have already been announced, including those of Merck Frosst ($205 million), Boehringer ($82 million), Ingelheim ($65 million), and Nordic Laboratories ($43 million). These capital spending projects already completed or under way are worth $77 million. The current trend toward mergers and consolidation in the international pharmaceutical sector poses a challenge to the Québec industry. Sparked by new leadership in Québec universities, $200 million should be invested in numerous R & D projects in the sector, in addition to the $430 million the local industry is expected to spend by 1996. Small and medium-sized pharmaceutical firms, involved primarily in the manufacture of generic drugs, are expanding rapidly; their shipments were up 20% in 1989. The companies are pursuing their efforts to gain a foothold in the American market.

ANALYSIS BY REGION

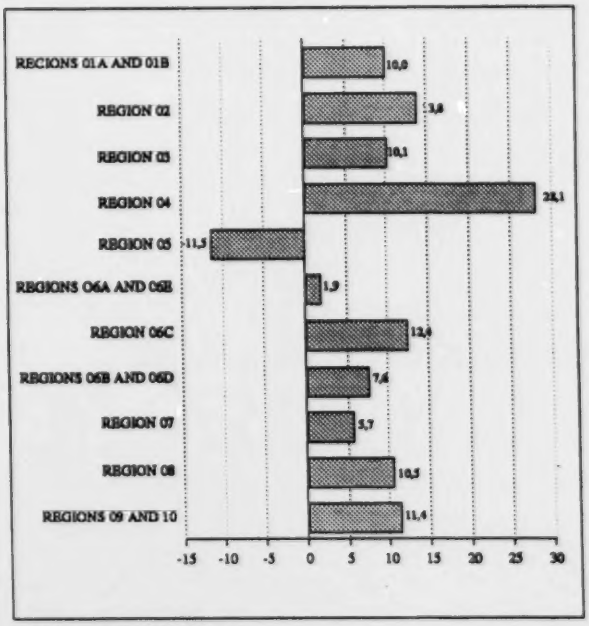
ANALYSIS BY REGION

Different aspects of regional economic performance in Québec in 1989 have been analysed in the present document, i.e. the labour market, construction, capital spending, and investment projects announced or under way.

The information presented has been obtained from various sources. Statistics have been selected on the basis of their availability in the administrative regions, and their frequency of publication. The data used are from the BSQ, the Commission de la construction du Québec, newspaper articles, and the Statistics Canada labour force survey. However, the findings of this analysis must be interpreted cautiously because of the limited samples used to make regional estimates.

Following a recent revision of regional boundaries, Québec now has 16 administrative regions. For the time being, complete statistical information is not available for all of the new regions. Territorial groupings have been used to solve this problem. All told, 11 regions are examined in this first analysis by region.

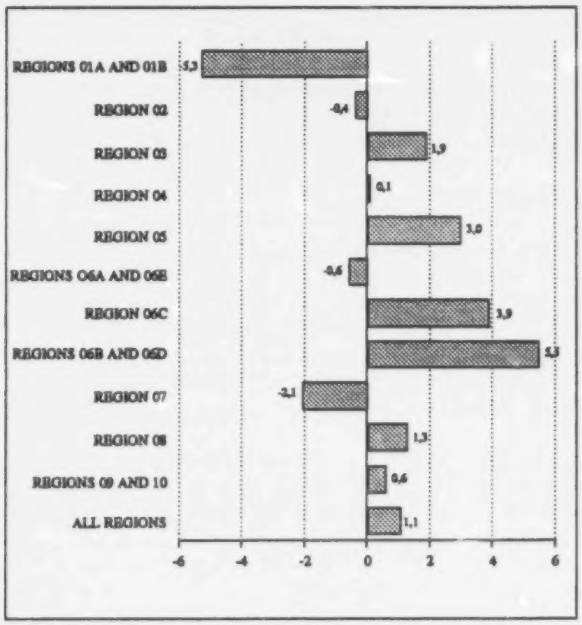
CAPITAL SPENDING IN MANUFACTURING
CONTRIBUTION OF THE REGIONS
AS A PERCENTAGE OF THE OVERALL INCREASE
1989*



* Estimates revised at mid-year.

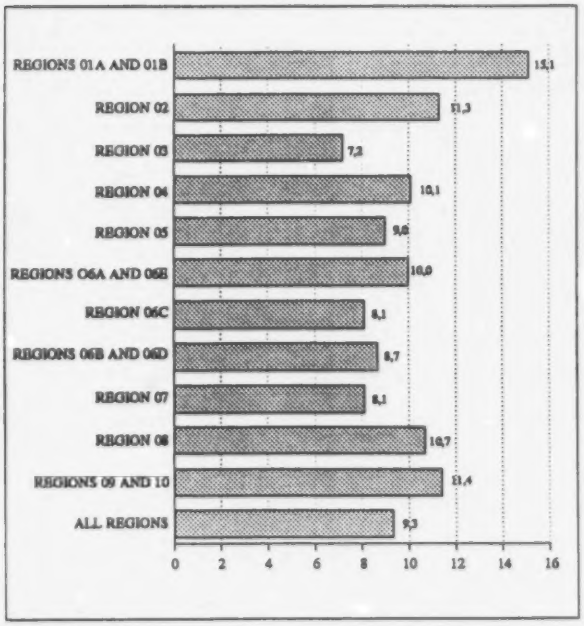
Bas-Saint-Laurent	01A	Laval	06B
Gaspésie—Îles-de-la-Madeleine	01B	Laurentides	06B
Saguenay—Lac-Saint-Jean	02	Lanaudière	06D
Québec	03A	Montérégie	06C
Chaudière-Appalaches	03B	Outaouais	07
Mauricie—Bois-Francs	04	Abitibi-Témiscamingue	08
Estrie	05	Côte-Nord	09
Montréal	06A	Nord-du-Québec	10

EMPLOYMENT BY REGION
PERCENTAGE CHANGE
1989 / 1988*



* First 11 months

UNEMPLOYMENT RATE
BY REGION
1989*



* First 11 months

BAS-SAINT-LAURENT AND GASPÉSIE — ÎLES-DE-LA-MADELEINE

A downturn in employment and investor optimism were the hallmarks of 1989 in the Bas-Saint-Laurent and Gaspésie—Iles-de-la-Madeleine regions.

In the first eleven months of 1989, employment decreased by 5.2%, thus pushing local unemployment from 13.6% in 1988 to 15.1% in 1989 (data for the first eleven months of the year). This figure, nearly six points above the Québec average, ranked the Bas-Saint-Laurent and Gaspésie—Îles-de-la-Madeleine regions first in terms of unemployment.

Problems in the fishing sector in Gaspésie were largely responsible for lower employment. Plunging prices and the new policy of allocating quotas on several fish and shellfish species hampered the local economy and led to lower production in fish processing plants, followed by the inevitable layoffs.

According to the Commission de la construction du Québec, construction in the Bas-Saint-Laurent and Gaspésie—Îles-de-la-Madeleine regions adjusted itself in 1989 to the changing economic situation. In the second quarter of 1989, the number of hours worked in the construction industry dropped by 12% in relation to the same period in 1988, although the number of active wage earners increased by 7%. However, when the Miron ciment plant in Gros-Cacouna ($10 million) and the Donohue Matane construction project enter a more labour-intensive phase, the reduction in hours worked should abate.

Various projects in the manufacturing industry may push employment upwards in 1990. Growth in capital spending in the region was the highest anywhere in Québec. Totalling $906 million, that spending showed a 44% increase over 1988, due in large part to manufacturing sector investments.

Bas-Saint-Laurent	01A	Laval	06E
Gaspésie—Îles-de-la-Madeleine	01B	Laurentides	06B
Saguenay—Lac-Saint-Jean	02	Lanaudière	06D
Québec	03A	Montérégie	06C
Chaudière-Appalaches	03B	Outaouais	07
Mauricie—Bois-Francs	04	Abitibi-Témiscamingue	08
Estrie	05	Côte-Nord	09
Montréal	06A	Nord-du-Québec	10

Fishing and allied industries have not been inactive. Baie des Chaleurs Aquaculture is about to invest $5.8 million at its Saint-Omer facilities in order to increase eightfold its production of salmon within four years. In Nouvelle, Saukeb, which specializes in genetic breeding, has developed a technique for reconditioning black salmon and is launching a $2 million investment program.

Socomer, the first fresh fish marketing consortium, was established in eastern Québec in the summer of 1989. Six of the main fish processing plants have joined forces to develop a common marketing network. This initiative should enable the regional fishing industry to achieve stability, through the pooling of the fresh fish marketed, and broaden its expertise in response to the demands of the major food distribution networks.

Several other major fish processing projects were launched. In Gaspé, Baccalao Del Castillo implemented a $2.7 million investment program; the firm will specialize in products from secondary and tertiary processing. In Anse-à-Brillant de Gaspé, La Charcuterie de la mer began its operations in the spring of 1989. The firm specializes in the tertiary processing of fish products; its $2 million investment has created 30 jobs. In the spring of 1989, Produits Baie-Bleue completed a $2 million investment project involving the processing and marketing of cultivated mussels in Saint-Omer.

Wood is the region's other main resource and the pulp and paper industries benefited from buoyant world markets in 1988 and the first half of 1989. Donohue Matane pursued a $317 million capital spending project at its Matane pulp mill; of this amount, $30 million is earmarked for related industrial infrastructures. The company has contributed significantly to maintaining industry vitality.

Sawmills are having to cope with reduced lumber prices and a slowdown in construction in North America. Faced with this difficult situation, Donohue Matane has undertaken a $12 million rationalization program in its four sawmills, with a view to optimizing fibre recovery and keeping the mills running year round. Enhanced technical efficiency has been accompanied by increased overall production capacity in the plants.

The presence of Bombardier in La Pocatière has made the transportation equipment industry a driving force in regional economic development. The firm obtained two big orders in 1989 which will allow it to maintain its work force of 800 in the La Pocatière plant. The New Jersey Transit Corporation has ordered 50 suburban railway cars, worth $49.5 million. The second contract, worth $200 million, calls for Bombardier to build shuttle trains for the Channel tunnel; it gives the firm a foothold on the European transportation equipment market. In Matane, Chantier Naval Matane obtained a contract to build two shrimp trawlers, worth $2.2 million; the company will double its production capacity as a result.

Among other dynamic manufacturing firms, Moulage Sous Pression A.M.T. in Saint-Cyprien, a small firm specializing in moulded zinc and aluminum parts, invested $1.7 million to expand and modernize its plant, to take advantage of the Free Trade Agreement.

SAGUENAY — LAC-SAINT-JEAN

The employment picture in the Saguenay—Lac-Saint-Jean region was not as bright in 1989 as it used to be, although investment was brisk. The labour market should experience a turnaround in the coming months as capital spending projects are completed.

The labour market showed signs of stagnation in the region between 1988 and the first eleven months of 1989. In Québec as a whole, employment was up 1.1% over the same period. Unemployment figures improved slightly in the region, mainly the result of discouragement which led economic agents to withdraw from a flagging labour market. The unemployment rate fell from 12.6% at the end of 1988 to 11.3% in 1989 (data for the first eleven months of the year).

In contrast, capital spending (up 28.4%) spearheaded economic activity in the region in 1989, making it one of the front runners in Québec. Large-scale projects undertaken locally by major manufacturing firms ranked the region second in terms of its 13.8% contribution to the increase in capital spending in the Québec manufacturing sector.

Under the impetus of vigorous capital spending, the construction industry in the region recorded the best performance in the province: in the second quarter of 1989, the number of active wage earners rose 28%, and the number of hours worked in the region, 30%, over the same period in 1988. For the year, this figure reached 46%.

Aluminum continued to dominate the regional economy. The biggest project is that of Alcan in Laterrière, worth $750 million. Brisk demand and rising aluminum prices have prompted Alcan to plan the construction of a new electrolysis plant in Alma, after phase four of the Laterrière smelter is brought on stream in mid-1991. Should the company go ahead with this huge project, it will increase its production capacity 200 000 metric tons a year, similar to that in Laterrière.

The Saguenay—Lac-Saint-Jean aluminum industry continues to be a world leader in research. Encouraged by highly favourable conditions, Alcan is investing $35 million in Jonquière to build the world's first Duralcan

plant. The Dubuc facility will engage in industrial production of this new alloy made up of aluminum and silicon carbide particles, which combines aluminum's advantages—it is light and non-corrodible—with remarkable strength. Alcan has also set up a research centre to seek new technologies linked to its traditional activities. A $12 million project resulted in the development of a new technique which makes possible the complete recovery of scum. Other research carried out in the centre has enabled Alcan to create C-Axis Technologie to produce metallic powders used as inputs in the manufacture of industrial ceramics ($10 million).

The Société des Technologies de l'Aluminium du Saguenay invested $1.2 million in its new plant in Chicoutimi, which will also manufacture products developed by Alcan's research centre. This production unit will design and build ultramodern machines, help reduce imports, and satisfy the needs of local customers, while improving its position on external markets.

Elsewhere in the manufacturing sector, mention should be made of forest-related projects in the region. Scierie L.B. is investing nearly $1 million to modernize its Lac-Bouchette mill. The company is a leader in its field, and employs little-used hardwood species. Abitibi-Price has allocated $44 million to modernizing its Alma plant and installing a new boiler.

New health care products will appear shortly on the market, derived from a peat-based material. Johnson & Johnson is investing $20 million in Lac Saint-Jean to produce the material in a recycled pulp mill, under the name Produits Desbiens Inc.

QUÉBEC AND CHAUDIÈRE-APPALACHES

The Québec and Chaudière-Appalaches regions experienced significant gains in employment in 1989.

In the first eleven months of the year, the number of jobs rose 1.9%, almost twice the rate in Québec as a whole. Vigorous job creation ranked the region first in terms of the fight against unemployment. The unemployment rate reached 7.2% (data for the first eleven months of the year), 2.1 points below the figure for Québec as a whole.

In the second quarter of 1989, the construction industry was relatively stable, although a marked upswing is likely in 1990, bearing in mind major investment projects announced or under way in the manufacturing sector. Under the impetus of such projects, capital spending soared, bringing the growth rate from 1% in 1988 to 14.1% in 1989. Primary metals, non-metallic mineral products, pulp and paper and transportation equipment helped spawn the economic revival.

Alumax, an American multinational, has officially announced the construction of a $1 billion aluminum smelter in Deschambault, slated to begin in the spring of 1990, with the first casting scheduled for February 1992. Some 2 000 workers will be employed on the Deschambault work site, which will generate $500 million in economic spinoff in Québec during construction, and create 1 000 indirect jobs.

The non-metallic minerals sector enjoyed vigorous growth. The construction by Glaverbel of the Glaverbec flat glass factory in Saint-Augustin-de-Desmaures is well under way. The $140 million facility will come on stream in mid-1990 and have a daily capacity of 500 tons of molten glass; it will create 300 direct jobs and more than 500 indirect jobs. In Thetford Mines, Granirex is building the first North American marble, granite and quartz tile and slab manufacturing plant, at a cost of $18 million.

The pulp and paper sector remained buoyant, despite a downturn in the newsprint market in the second half of the year. Daishowa recently opened a $125 million thermomechanical pulp mill in Québec City and is studying a de-inking plant project worth an estimated $45 million to $60 million. The local industry is adapting to increasingly prevalent legislation in the U.S. requiring the use of paper containing recycled fibres. Cartem is building a $14 million folding cardboard box plant in Sainte-Marie-de-Beauce, which will double the firm's production capacity.

Elsewhere in the manufacturing sector, capital spending was brisk. Texel has earmarked $4.1 million to expand its plant and cater to specialized markets in the United States, especially in the realm of geotextiles. Prodair is planning to build a $15 million hydrogen plant to supply fuel to the Glaverbec facility; the project is one of the first to be launched in the wake of the Belgian firm's establishment in Québec. Ultramar intends to invest over $85 million in the coming months to further expand its Saint-Romuald refinery; work could begin in 1990. A pyrolysis research centre is being contemplated in Québec City; if it is built, a pilot plant designed to treat oil sludge would be erected at a cost of $6 million on the site of the Ultramar refinery.

MAURICIE — BOIS-FRANCS

Job creation stood virtually at a standstill in the Mauricie—Bois-Francs region in 1989. In the first eleven months of the year, the employment growth rate was only 0.1%, compared with 4.2% for 1988 overall. A downturn

in the paper sector accounted in part for this result. Numerous layoffs nudged the unemployment rate to 10.1% in 1989 (data for the first eleven months of the year).

Starting in mid-1989, the employment situation brightened, a reflection of the numerous investment projects announced or under way.

Investment was especially brisk in a number of non-durable goods manufacturing sectors. Projects launched by durable goods industries will generate many jobs in the future, and enable the region to consolidate its industrial base and continue to expand. Capital spending increased 30.8% in 1989, following an encouraging 11.2% gain in 1988. The region accounted for 28.1% of the overall increase in capital spending in the Québec manufacturing sector in 1989.

Major investment projects have been announced in the primary metals sector, in particular aluminum and steel. ABI is investing $550 million to add a third series of electrolysis vats. Investment at the Bécancour aluminum smelter totals $1.65 billion; the facility currently employs 775 people and this figure will rise to 1 000 once the expansion project is completed, making it one of the biggest employers in the region. At the height of construction, roughly 2 000 additional workers will be on the site; the project will create another 3 000 indirect jobs.

Metcoat, a new subsidiary of the Harricana Group, is building a $4.2 million metal covering plant in Drummondville. Siemens Electric and Venmar, both located in Drummondville, are spending $10 million and $2.8 million, respectively, to expand their facilities. Forano in Plessisville is modernizing its machinery plant at a cost of $4.5 million. In the non-metallic mineral products sector, Arriscraft, a recently established brick manufacturer, has announced a $12 million project in Saint-Étienne-des-Grès, which will create 100 jobs.

As was the case elsewhere in Québec in the non-durable goods sector, it was the paper industry that led the way in terms of investment in 1989. The management of Stone-Consolidated approved a major expansion project at the Belgo plant in Shawinigan, worth $57 million, designed to bolster productivity, increase thermomechanical pulp production capacity, and reduce suspended matter to enhance environmental protection. Industries Cascades launched a $25 million expansion project at its Kingsey Falls plant, to add a third tissue paper machine. Groupe Orford in Drummondville has completed a feasibility study concerning a de-inking plant and is expected to invest over $15 million in 1990.

Mention should also be made of a number of investment projects under way: Kruger in Trois-Rivières ($400 million), and Consolidated Bathurst in Grand-Mère ($280 million). The German group Kunz, operating in Québec under the name Uniboard, began construction in Drummondville of a laminated paper plant. The C.D.M. Laminés laminated paper plant will cost $80 million and begin operations in late 1990.

Many paper manufacturers use chemical-thermomechanical processes, thereby pushing up demand for hydrogen peroxide. To satisfy such demand, Oxychem Canada has decided to invest $18 million to double the production capacity of its Bécancour plant. In the plastics sector, Z.C.L. Canada is building a $3.2 million underground storage tank factory in Drummondville. In the same city, Dominion Textile, the world's biggest denim manufacturer, has earmarked $34 million for plant modernization. Niagara Lockport is investing $8 million to expand and modernize its Warwick plant; Satexil is investing $8.5 million in Grand-Mère.

In the food and beverages sector, Primaviande is building a $6.5 million specialized meat packing plant. Breuvages T.C.C., a subsidiary of Coca-Cola, is investing $5.1 million to expand and modernize its Trois-Rivières production facilities. Finally, Imprimerie Gagné, one of Québec's leading book printers, is completing a three-year, $8 million investment program.

Under the impetus of buoyant industrial construction, the number of hours worked in the construction industry rose 24% in the second quarter of 1989 (and 44% in the last six months). Growth was sustained by water purification projects and the construction of a Hydro-Québec power transmission line.

ESTRIE

In 1989, employment in the Estrie region increased by 3% (data for the first eleven months of the year). The vigorous performance of 1988 (employment growth of 6.7%) has not been fully replicated. Streamlining in the textile industry was largely responsible for this slowdown. The labour market was unable to entirely absorb new arrivals in the region, with the result that the unemployment rate climbed to 9% in 1989 (data for the first eleven months of the year), still slightly below the provincial average.

Capital spending in the manufacturing sector, after two years of weakening growth, dropped in 1989. Such spending was 17.2% lower than in 1988.

The number of investment projects in the Estrie region has fallen in recent years, although buoyancy is unwavering in some sectors. Mention should be made of a $53 million investment by Cascades in its East Angus cardboard factory; the company is expanding the facility and purchasing

de-inking equipment. Caoutech Inc. is building an ultra-modern tire recycling plant in Saint-Élie-d'Orford, the first of its kind in Québec. It will produce rubber crumb, used, among other things, as an input in the manufacture of rubber mats. The $3.6 million investment will spur regional development and offer an efficient solution to the problem of environmental protection. Canox is building a liquid hydrogen plant in Magog at a cost of $36 million.

The downturn in industrial and residential construction forecast in 1989 by the Commission de la construction du Québec has gradually materialized. The slowdown began with a striking drop in the number of hours worked in the second quarter of 1989 in relation to the same period in 1988 (27%), and an 11% decrease in the number of active wage earners. This situation is attributable to progress on several construction sites, including the $800 million Domtar plant, and a 45% plunge in housing starts in the Estrie region, which was especially acute. The commercial construction sector remained active: a number of commercial buildings were under construction in Magog, Sherbrooke, East Angus and Cookshire.

LAURENTIDES AND LANAUDIÈRE

The Laurentides and Lanaudière regions recorded a 5.5% gain in employment in 1989 (data for the first eleven months of the year), the best performance in Québec. The creation of 15 100 jobs helped reduce the unemployment rate, down from 10% in 1988 to 8.7% in 1989. Employment was up in most branches of the manufacturing sector, which also spurred growth in capital spending.

Local investment has been vigorous for the past three years; it was expected to reach $3.163 billion in 1989, largely due to numerous projects in the manufacturing sector.

Following several years of lacklustre performance, the pulp and paper sector enjoyed renewed growth in investment. Three major projects have spearheaded this revival. Scott Paper is investing $36 million to build a waste paper plant in Crabtree and is also contemplating a $100 million investment on a chemical-thermomechanical pulp mill in Joliette. Price Wilson is expanding its facilities in Lachute at a cost of $13 million.

The rubber and plastics products sector also experienced renewed growth in 1989. FRE Composites, a specialized composite parts manufacturer, is investing $6.6 million to modernize and expand its plant in Lachute. Firestone has increased by 50% the capacity of its only Canadian rubber plant, located in Joliette, at a cost of $85 million.

In the transportation equipment sector, the highlight of the year was, by far, the impending arrival near Mirabel of Canadair, which is to begin maintaining military aircraft there in 1990. The aeronautics sector, of which Bell Helicopter is a part, is becoming a mainstay of the regional economy. Automobile manufacturing continues to play a major role, as reflected in GM's investment in Boisbriand.

Turning to the chemical products sector, the Italian group Vibac is to build a $30 million polypropylene film extrusion plant in Lavaltrie. The facility will supply the firm's adhesive tape factory in Pointe-aux-Trembles, and satisfy the North American content requirements under the Free Trade Agreement. Dispar, a manufacturer of veterinary products, will spend $4.8 million in the near future to modernize and expand its facilities in Joliette.

Several investment projects are under way in the food and beverages sector: Best Food Canada in Boisbriand ($15 million), Aliments Da Vinci in Assomption ($5 million), Boulangerie & Pâtisserie Boisbriand ($4 million), and Abattoirs Laurentides in Saint-Esprit-de-Montcalm ($3.8 million).

Elsewhere in the region, Sport Hattem in Saint-Jérôme has joined forces with the Finnish group Tackla to build an $8 million high-end hockey equipment plant. In the non-metallic mineral products sector, Graybec has earmarked $14.5 million to increase limestone production capacity at its Joliette plant.

The downturn in the regional construction industry became more pronounced. In the first half of 1989, the number of hours worked declined by 3%, and by 14% in the second quarter. The advancement of construction at the General Motors plant and the Lanofor factory in Saint-Michel-des-Saints ($63 million) explains this drop. However, water purification projects and industrial construction helped sustain activity in the sector.

MONTÉRÉGIE

Some 21 000 jobs were created in the region in 1989 (data for the first eleven months of the year), a 3.9% increase over 1988, when employment rose only 1%. The unemployment rate reached 8.1% (data for the first eleven months of the year), below the Québec rate and among the lowest in the province.

The buoyant labour market was accompanied by vigorous investment. Capital spending in 1989 grew steadily, up 1.6% over 1988 figures, and 14.6% over 1987. Most sectors completed investment projects or announced new ones.

Growth in the Québec aeronautics industry was due in large part to the Montérégie region; the establishment in Saint-Hubert of the space agency will consolidate this po-

sition in the future. Given the trend toward disarmament, Oerlikon, a manufacturer of military hardware, will diversify its activities. Over five years, the company plans to spend $100 million in R & D at its Saint-Jean-sur-Richelieu plant, to develop new products in the space, transportation and environmental fields. Pratt & Whitney is also taking advantage of the brisk civil aviation market; it has launched a five-year, $300 million program to expand and modernize its facilities in Longueuil. By launching a new engine in the PW 130 family, the world leader in small- and medium-power aircraft turbines has gained a foothold on the aircraft market for regional carriers. General Electric carried on its investment program of $40 million in Bromont to manufacture aircraft engine blades.

Barely a year after Hyundai opened its $325 million auto plant, the company has announced the construction in Bromont of a $120 million parts stamping plant, to show its willingness to eventually meet North American content requirements under the Free Trade Agreement. Montupet, a French auto parts manufacturer, is building a $112 million parts facility in Rivière-Beaudette.

The regional electrical and electronic products sector enjoyed robust health in 1989. To maintain its technological lead and sustain productivity, IBM will invest $135 million over two years in its Bromont plant.

Two major investment projects were announced in the steel sector. Stelco Steel in Contrecoeur is spending $30 million to expand and modernize its mill; an additional $10 million will be invested over two years. Once completed, the project will bring the company's work force to 500, an all-time high. QIT-Fer et Titane has launched a $120 million expansion project in Sorel. In the zinc sector, CEZ has embarked upon a vast plant modernization program in Valleyfield, at an estimated cost of $120 million. In addition to these major projects, mention should be made of Sidbec-Dosco and Dofasco, which are building a galvanizing plant in the Coteau-du-Lac industrial park, at a cost of $50 million. Aciers Inoxydables Atlas in Tracy, owned by the Korean Sammi group, is studying a three-year, $300 million modernization project.

Development in the petrochemical sector has surged ahead following the official announcement of the Soligaz project. Pétromont is consolidating its position by investing $55 million in Varennes to increase by 20% its ethylene production capacity, and increase storage capacity. The Italian firm Himont, another important player in the sector, will spend $35 million to build a new polymer plant in Varennes. The facility will have an annual capacity of 65 000 metric tons, and will come on stream in mid-1990. This initiative is important because of spinoff in the Québec plastics industry, and because it will bolster the region's industrial base. Moreover, it will enhance the competitiveness of plastics products manufacturers and enable them to penetrate new markets.

Activity was also brisk in the inorganic chemistry sector. Alby Chlorate embarked upon a $30 million sodium chlorate plant modernization program in Valleyfield. PPG Canada is investing $40 million in Beauharnois to produce chlorine and alkali. In Sorel, Tioxide Canada has allocated $50 million to modernizing its titanium dioxide plant.

Perkins Paper launched a $45 million expansion project at its Candiac production facilities; increased sales prompted the company to purchase a second paper manufacturing machine. Emballage Montcorr has completed a $10 million corrugated cardboard plant in Coteau-du-Lac and is now running in the facility.

In the yarn and textile sector, the Hafner group will spend $31 million by 1991 modernizing its facilities to enhance competitiveness on the U.S. market in the wake of the Free Trade Agreement. Tapis Peerless in Acton Vale launched a $13 million expansion program. To bolster product quality, Asten Canada, which manufactures canvas for paper machine dryers, has undertaken a $10.6 million plant expansion project in Valleyfield.

In the food sector, Weston is investing $47 million to replace its Longueuil bakery; the new facility will be the most modern in North America, with a capacity of 11 000 loaves an hour. Le Duff, a French group, is investing $6 million in its Bridor subsidiary in Boucherville; it produces frozen dough for bakeries and fast food outlets. In the same city, Provigo will spend $4.5 million on a food distribution centre equipped with an advanced food preservation technology. In the beverages sector, Schenley has earmarked $7 million for plant expansion and modernization in Valleyfield. The relocation of the Molson brewery bottle sorting centre in Boucherville has been completed, at a cost of $13 million. Pillsbury Canada is to spend $4 million by 1990 to expand and modernize its cannery in Sainte-Martine.

According to the Commission de la construction du Québec, 13% fewer hours were worked in the second quarter of 1989 than in the same period a year earlier. A 26% drop in housing starts was mainly responsible for this downturn. Brisk activity in the trade and manufacturing sectors helped sustain employment in the construction industry, which actually rose 5% in the first half of 1989. This trend should persist in the coming months, given the numerous construction projects under way, in particular the Ikea distribution centre in Brossard ($15 million), and a commercial complex in the same city.

MONTRÉAL-CENTRE AND LAVAL

In the Montréal-Centre and Laval regions, job creation was sluggish in 1989 in comparison with preceding years. Employment declined 0.6% (data for the first eleven months of the year), and the unemployment rate climbed to 10% (data for the same period), 0.7 point above the provincial average. However, most branches of the manufacturing sector continued to invest in the region. Capital spending rose 7.1% in 1989, as against 6.1% in 1988, a sure sign of robust economic activity.

The transportation equipment sector was very active, despite the closure of the M.I.L. Vickers shipyards and Via Rail cuts. Brisk sales in the aeronautics sector benefited the suppliers of aircraft parts and structural components. One of them, Patenaude Industries, a subcontractor of Canadair which specializes in machining aircraft parts, invested $5 million to modernize and relocate its facilities in Laval. However, Canadair had the best news to offer.

Bombardier has given the go-ahead to its aeronautics division to build the RJ aircraft, designed for regional carriers. Under the $275 million, three-year program, Canadair will create 3 000 direct jobs at the height of production in 1994, and 3 000 indirect jobs among sub-contractors. This project, and the acquisition of Shorts Brothers in Northern Ireland at a cost of $60 million makes Canadair the world's leading manufacturer of jet aircraft designed for regional carriers.

Canadair returned from the Bourget air show with a full order book. It has sold 40 regional jets, part to British Aerospace and part to Alisarda, an Italian firm, in a deal worth $600 million. Airbus aircraft sales have soared. Canadair, acting as a sub-contractor, was initially asked to produce components for 600 aircraft at a cost of $1.2 billion. These figures have now risen to $2 billion for 900 Airbus A 330/A 340 aircraft, over 16 years, as originally stipulated. Moreover, the Québec government is committed to replacing the engines of its entire fleet of 19 CL-215 water bombers, at a cost of $106 million.

Growth was also sustained in the electrical and electronic products sector. Camco, in which General Electric Canada has a 51% interest, will spend $30 million to modernize its plant in Montréal-Est. York Lighting will invest $8.1 million to relocate and expand its plant in Lachine. Three major investment projects in the electronic products subsector are noteworthy. Circo Craft will invest more than $40 million in the production of printed circuits to satisfy growing demand. Phillips Electronics is spending $47 million to concentrate international microcomputer production at its Saint-Laurent facility, making the Dutch multinational Canada's foremost personal computer manufacturer. NCR Canada has announced plans to invest $14 million over the next three years.

Three firms in the machinery sector are modernizing their facilities. Hewitt Equipment, a heavy machinery distributor, is investing $5.7 million in its industrial and energy division in Pointe-Claire. Les outillages Ricci, a tool manufacturer, plans to spend $3.2 million over several years; Hymac in Laval has earmarked $4.9 million for a plant expansion and modernization project.

Several investment projects in the metal fabricating sector are significant. R & M Métal is modernizing its Anjou mill at a cost of $5.8 million; Fabri-Métal is expanding its facilities in Montréal-Nord ($1.2 million); Indal is building an aluminum section plant in Montréal ($6 million); and Continental Can, Canada's foremost can manufacturer, plans to build a new, ultramodern factory in Saint-Laurent ($20 million).

In the primary metals sector, the C.C.R. division of Noranda Minerals is modernizing its copper refinery in Montréal-Est; the project will cost $40 million over five years. As for the non-metallic mineral products sector, Lamiver will build the first safety glass factory in Québec. Located in Montréal-Est, it will cost $6 million to build.

The official launching of the $410 million Soligaz project is a striking event in the petrochemical sector, for the regional industry and for Québec as a whole. It will involve building a pipeline from Sarnia to Montréal. This major investment will ensure the future growth of the Montréal petrochemical industry by guaranteeing access at competitive prices to liquid natural gas. Soligaz has already initiated an important project: Pétromont is investing $100 million in Montréal-Est to purchase the Union Carbide polyethylene plant. Specialists predict that several other projects will be drawn to the regions neighbouring Montréal-Centre and Laval.

Kemtec completed investment in a paraxylene plant in Montréal, at a cost of $110 million. Union Carbide pursued a $30 million, two-year modernization project and has just developed an industrial process called Cansolv, designed to catch acid emissions. To test this new technology, which has considerable potential for dealing with the problem of acid rain, its inventors will build a $5 million pilot plant in the coming months in Montréal-Est.

With the adoption of Bill C-22, federal legislation designed to protect pharmaceutical patents, several large-scale capital spending and applied research projects have been announced. Among the biggest projects, mention should be made of that of Merck Frosst, which is investing $205 million over several years to build a therapy research centre in Kirkland. Nordic Laboratories has earmarked $43 mil-

lion for its facilities in Laval; Boehringer Ingelheim is to invest $82 million over nine years in Laval; Squibb has launched a $65 million expansion project.

In the clothing sector, several expansion and modernization projects are noteworthy: Bonneterie Avalon ($2.1 million), Industries Béco ($5.1 million), Lingerie Hamilton ($8.5 million), and Industries Majestic and Tricots Caramy ($7 million).

In addition to the $6 million plant modernization program undertaken by Aliments Wong Wing, two investment projects made headlines in the food and beverages sector: Molson Breweries plans to invest $80 million, and its competitor, Labatt, $90 million. Both projects are to be spread over three years, and are designed to increase the brewers' production capacity by 40% and 10%, respectively.

A downturn occurred in the construction industry in the second quarter of 1989; the number of hours worked fell by 10% in relation to the same quarter of the preceding year in the Montréal-Centre and Laval regions. Sluggish residential construction—housing starts were down 36% compared with an average of 14% province wide—caused the decline. However, activity in other building subsectors did not waver. A number of important commercial and office buildings are being completed, including the World Trade Centre ($150 million), Marathon-IBM ($200 million), and Prodevco-Lavalin ($250 million). Activity was also brisk in the institutional sector: UQAM ($39.2 million), the library of Concordia University ($40 million), and expansion at the Museum of Fine Art ($85 million).

OUTAOUAIS

Largely dependent upon forestry and exports of forest products, the Outaouais region experienced setbacks in 1989 resulting from a sharp drop in demand for forest products and a downward slide in the newsprint boom. Employment fell 2.1% in 1989 (data for the first eleven months of the year), although the situation appeared to improve at the end of the year. Despite sluggish job creation, the region had Québec's second lowest unemployment rate, i.e. 8.1% (data for the first eleven months of the year).

Growth in capital spending was less pronounced in 1989 (8.7%) than in 1988 (26.2%), although it was exceptionally high in the manufacturing sector. Numerous investment projects in the sector were announced or under way in the region. The completion of such projects helped sustain overall capital spending levels in 1989. Capital spending in the manufacturing sector rose from $146 million in 1988 to $248 million in 1989, a 70% increase.

Despite a foreseeable drop in demand for pulp and paper products, this industry group was nonetheless very active. Canadian Pacific Forest Products has launched a $32 million modernization project in Gatineau. MacLaren in Thurso ($168 million) and Scott Paper in Hull ($8 million) are also carrying out modernization programs.

In the wood sector, Bois jointés de l'Outaouais has invested nearly $1 million in a wood assembling plant in Low. CED-BEC is to build a cedar processing plant in Maniwaki, at a cost of $1.3 million.

Albright & Wilson, owned by the American firm Tenneco, plans to modernize its chemical products plant in Buckingham; some $40 million will be spent in 1989-1990.

Several sectors have witnessed substantial investment projects. CML Technologies is investing $2 million in a building in the Hull technology park which will double the floor area of its plant. The British company Plessey has announced the construction in Hull of the Aepos Technologies manufacturing facility which will produce software designed to protect communications (cryptotechnology), at a cost of $8 million. Pâte d'amande Edde is investing $1.2 million to build a plant in Gatineau. Using ultramodern equipment, the recently established firm will be able to satisfy the needs of Canadian bakeries.

In the first half of 1989, the number of hours worked in the construction industry in the Outaouais region rose 16% in relation to the same period the preceding year. This growth rate was well above the province-wide average of 3%, and resulted from extensive building in most sectors, e.g. the Digital, Albright & Wilson, MacLaren and Scott projects, and widespread road works. Construction in the residential sector also continued to rise; in the second quarter of 1989 new housing starts were up 12%, all the more remarkable in light of a 20% drop in Québec as a whole. The construction of several office buildings in Hull and Gatineau also kept the industry on an even keel in 1989.

ABITIBI-TÉMISCAMINGUE

The labour market in the Abitibi-Témiscamingue region was less robust in 1989 than in 1988. Regional employment climbed 1.3% (data for the first eleven months of the year), compared with 7.3% in 1988. The unemployment rate reached 10.7%, higher than the province-wide rate.

Capital spending in the manufacturing sector pointed to continued vitality in the region, rising from $874 million in 1988 to $1.1 billion in 1989, a 23.8% increase. Over a two-year period, in 1989 the region recorded a remarkable 100% increase in growth.

Basic industries in Abitibi-Témiscamingue suffered from sluggish lumber and metal fabricating markets in the region. Non-ferrous metal prices fell. The capacity utilization rate in the wood industry dipped sharply, from 88.9% to 83.7% between the second quarter of 1988 and the second quarter of 1989. However, the two biggest independent wood producers in the region, Forex in Val-d'Or and Normick-Perron in La Sarre, joined forces with paper manufacturers interested in wood cutting rights, which are becoming increasingly rare. Domtar acquired an interest in Forex, and MacLaren purchased Normick-Perron.

Various investment projects will help consolidate the region's manufacturing infrastructure and boost employment in the coming months. A number of projects are under way: the Noranda Minerals sulphuric acid plant in Rouyn-Noranda ($160 million); the Deak Resources zinc-copper-gold concentrator in Rouyn-Noranda ($24 million); the Unires resin and formaldehyde plant in Val-d'Or ($12.5 million); the Forpan particle board plant in Val-d'Or ($25 million); and the Tembec cardboard factory in Témiscaming ($270 million).

For the second consecutive year, the construction industry continued to expand. The number of hours worked increased markedly in the second quarter of 1989, from 25% at the beginning of the year to 38%. Industrial construction accounted by and large for sustained activity in the sector.

CÔTE-NORD AND NORD-DU-QUÉBEC

Employment rose by 0.4% in 1989 in the Côte-Nord and Nord-du-Québec regions (data for the first eleven months of the year). Aside from the remarkable growth recorded in 1988 (5.4%), the 1989 figure was the best in recent years. The unemployment rate remained stable at 11.4% (first eleven months of the year), notably higher than the Québec average.

Mining operations continued in the Fermont region. A vein of a very pure graphite was discovered and mining could commence in 1990. Tulinor, a granite tile manufacturer, is building a plant in Grandes-Bergeronnes, at a cost of $4.5 million. Industrial activity in the region will be given a boost by substantial investment projects now under way or about to be launched. Capital spending was up for the third consecutive year; it rose 23.8% in 1989.

In the primary metals sector, mention should be made of two major projects involving aluminum smelters. Reynolds is expanding its smelter in Baie-Comeau at a cost of $550 million; Alouette is building a $1.1 billion smelter in Sept-Iles. Once work has been completed, the Sept-Iles facility will employ roughly 1 000 people; the Baie-Comeau plant will hire 2 000.

In the middle of the summer, the Quebec and Ontario Paper Company launched a modernization project worth $130 million at its Baie-Comeau thermomechanical pulp mill; work should be completed in late 1990.

Massive projects have been undertaken in the electricity sector. They have generated employment and prompted important structural changes in the regional economy. The most striking project is the new Manic V hydroelectric generating station. More than $800 million is being invested to install additional equipment in the generating station, thus nearly doubling the output of the Daniel Johnson dam. Hydro-Québec is also adding power at LG2A at a cost of $1.7 billion, building a new power transmission line ($850 million), the Radisson substation ($31 million), and two dams on the Bersimis River ($20 million and $50 million). The utility is to decide in March 1990 whether to harness the hydroelectric potential of the Sainte-Marguerite River; should it go ahead with the project, it would engender substantial investment in the Côte-Nord region.

As a result of the foregoing activity, the construction industry recorded vigorous growth in the second quarter of 1989. The number of hours worked increased by 26% over the same period the preceding year; the number of active wage earners rose 27%. Moreover, many road works and port projects were under way; they helped spur the remarkable upsurge in construction in the region.

STATISTICAL TABLES

COMPARISON OF ECONOMIC PERFORMANCE
QUÉBEC, ONTARIO, CANADA 1988-1989
(PERCENTAGE CHANGE)

	Real GDP (1)		EMPLOYMENT		CAPITAL EXPENDITURES		CPI (2)	
	1988	1989	1988	1989 (11 months)	1988	1989	1988	1989 (11 months)
QUÉBEC	5.4	2.0	2.8	1.1	11.4	9.7	3.8	4.5
ONTARIO	5.1	2.9	3.7	1.8	11.4	11.6	5.1	6.3
CANADA	4.8	2.8	3.2	2.0	12.8	11.1	4.1	4.9

(1) Gross domestic product at factors' price, in 1981 dollars.
(2) Consumer price index, Montréal, Toronto, Canada.
SOURCES: Conference Board of Canada.
Statistics Canada.
Direction de l'analyse de la conjoncture industrielle, MICT.

UNEMPLOYMENT RATE
QUÉBEC, ONTARIO, CANADA
1988-1989

	UNEMPLOYMENT RATE	
	1988	1989 (11 months)
QUÉBEC	9.4	9.3
ONTARIO	5.0	5.1
CANADA	7.8	7.5

SOURCES: Statistics Canada (Cat. 71-001).
Direction de l'analyse de la conjoncture industrielle, MICT.

HOUSING STARTS
QUÉBEC, ONTARIO, CANADA
1989 (10 MONTHS)

	HOUSING STARTS (pop. 10 000+)	
	1989 (thousands)	1989/1988 (%)
QUÉBEC	34.4	-17.7
ONTARIO	68.7	-5.7
CANADA	153.8	-3.2

SOURCES: Statistics Canada (Cat. 64-002).
Direction de l'analyse de la conjoncture industrielle, MICT.

MAIN ECONOMIC INDICATORS
QUÉBEC
1988-1989 (percentage change)

	Real GDP		EMPLOYMENT		CAPITAL EXPENDITURES		WAGES	
INDUSTRY	**1988**	**1989**	**1988**	**1989** (11 months)	**1988**	**1989**	**1988**	**1989** (9 months)
Agriculture	1.3	0.9	-7.4	-18.4	-8.8	5.7	4.1	2.6
Other primary industries	-1.8	4.1	-1.5	12.5	-11.7	17.4	5.4	4.7
Manufacturing	6.0	2.9	9.4	3.0	16.2	38.3	9.8	8.1
Construction	8.9	2.6	10.3	-5.2	5.4	-8.4	18.8	10.7
Transportation, communication and other utilities	4.6	0.5	-0.1	-2.2	32.2	20.5	6.0	8.0
Trade	8.2	0.8	-0.1	5.1	2.0	12.3	9.4	7.2
Finance, insurance and real estate	6.2	2.3	-1.8	4.6	9.2	5.2	13.8	6.5
Service	4.0	2.2	3.2	-0.7	10.2	10.8	8.8	7.3
Public administration	1.3	2.0	-4.1	5.2	14.1	11.6	3.6	7.3
ALL INDUSTRIES	**5.4**	**2.0**	**2.8**	**1.1**	**11.4**	**9.7**	**9.2**	**7.5**

SOURCES: Conference Board of Canada, *Provincial Outlook* october 1989.
Statistics Canada, *The Labour Force* (Cat. 71-001);
Private and Public Investment in Canada (Cat. 61-205);
Estimates of Labour Income (Cat. 72-005).
Direction de l'analyse de la conjoncture industrielle, MICT.

INTERNATIONAL ECONOMIC SITUATION
1988-1989

COUNTRY	Real GDP		EMPLOYMENT		INFLATION (1)		UNEMPLOYMENT RATE	
	1988	1989	1988	1989	1988	1989	1988	1989
	(% change)		(% change)		(% change)		(%)	
Canada	4.8	2.8	3.2	2.0	3.7	4.8	7.8	7.5
United States	4.4	3.0	2.3	2.0	3.9	4.5	5.5	5.2
Japan	5.7	4.8	1.7	1.9	0.0	1.7	2.5	2.3
West Germany	3.6	4.3	0.6	1.4	1.2	3.3	7.9	7.3
France	3.4	3.4	0.8	1.0	2.7	3.4	10.0	9.5
United Kingdom	4.2	2.3	3.0	1.6	4.9	6.1	8.2	6.5
Italy	3.9	3.3	1.2	0.5	5.0	5.7	12.2	12.0
TOTAL, OECD	**4.4**	**3.6**	**1.8**	**1.7**	**3.3**	**4.4**	**7.0**	**6.6**

(1) Private consumption deflators (OECD figures).
SOURCES: OECD, *Perspectives économiques de l'OCDE* December 1989.
Conference Board of Canada, 1989.
Statistics Canada.
Direction de l'analyse de la conjoncture industrielle, MICT.

OUTLOOK FOR 1990
OECD FORECASTS
(rate or percentage change)

COUNTRY	Real GDP or GNP	EMPLOYMENT	INFLATION (1)	UNEMPLOYMENT RATE
Canada (2)	2.0	1.5	4.8	7.6
United States	2.3	1.1	4.7	5.4
Japan	4.5	1.6	2.7	2.3
West Germany	3.2	1.2	2.6	7.1
France (2)	3.1	0.9	2.9	9.3
United Kingdom(2)	1.3	0.1	6.5	6.6
Italy (2)	3.2	0.5	5.5	12.2
TOTAL, OECD	**2.9**	**1.1**	**4.5**	**6.6**

(1) Private consumption deflators (OECD figures).
(2) GDP.
SOURCES: OECD, *Perspectives économiques de l'OCDE* December 1989.
Direction de l'analyse de la conjoncture industrielle, MICT.

ECONOMIC FORECASTS FOR 1990
QUÉBEC
(rate or percentage change)

	Confédération Desjardins	Conference Board	Caisse de dépôt
	Dec. 1989	Oct. 1989	Dec. 1989
GDP	1.8	1.9	2.0
EMPLOYMENT	0.9	0.5	1.0
UNEMPLOYMENT RATE	9.5	9.3	9.6
MONTRÉAL CPI(1)	4.2	4.7	4.3

(1) CPI: Consumer price index.
SOURCE: Direction de l'analyse de la conjoncture industrielle, MICT.

ECONOMIC INDICATORS
QUÉBEC,ONTARIO,CANADA
1988-1989

	GDP (1) (current $)		EMPLOYMENT		UNEMPLOYED		CAPITAL EXPENDITURES	
	1988	1989	1988	1989 (11 months)	1988	1989 (11 months)	1988	1989
	(millions of $)		(thousands)		(thousands)		(millions of $)	
QUÉBEC	128 195	136 685	3 000.5	3 035.1	310.8	311.9	27 784.1	30 488.5
ONTARIO	217 716	235 384	4 862.1	4 950.4	255.9	263.3	50 087.9	55 894.3
CANADA	538 499	578 208	12 244.4	12 495.3	1 030.5	1 018.7	123 163.6	136 862.0

(1) Gross domestic product at factors' price.
SOURCES: Conference Board of Canada.
Statistics Canada.
Direction de l'analyse de la conjoncture industrielle, MICT.

MANUFACTURERS' SHIPMENTS
QUÉBEC
1986-1989

INDUSTRY	1986	1987	1988	1989 (9 months)	1987/1986	1988/1987	1989/1988 (9 months)
	(millions of dollars)				(percentage change)		
Food	8 884	9 080	9 557	6 904	2.2	5.3	-2.3
Beverages	1 282	1 397	1 454	1 135	9.0	4.1	8.7
Tobacco products	827	1 032	1 035	842	24.9	0.2	11.2
Rubber products	‡	‡	‡	‡	‡	‡	‡
Plastics products	1 042	1 182	1 299	1 023	13.4	9.9	3.9
Leather	480	492	499	367	2.6	1.3	-3.7
Primary textiles	1 644	1 786	1 813	1 330	8.6	1.5	-1.9
Textile products	1 340	1 430	1 487	1 096	6.7	3.9	-1.7
Clothing	3 693	3 894	3 885	3 013	5.4	-0.2	2.8
Wood	3 049	3 604	3 459	2 656	18.2	-4.0	0.3
Furniture	1 191	1 348	1 476	1 186	13.2	9.5	9.0
Paper	6 648	7 416	8 014	6 079	11.5	8.1	1.9
Printing and publishing	2 692	2 906	3 161	2 408	7.9	8.8	3.2
Primary metals	5 141	6 145	7 316	5 526	19.5	19.0	3.1
Metal fabricating	3 010	3 623	4 033	3 104	20.4	11.3	3.4
Machinery	1 189	1 277	1 500	1 166	7.4	17.5	10.5
Transportation equipment	5 503	4 985	6 311	5 039	-9.4	26.6	12.9
Electrical products	3 533	3 986	4 501	3 969	12.8	12.9	19.3
Non-metallic mineral products	1 425	1 639	1 677	‡	15.0	2.3	‡
Petroleum products	2 640	2 834	2 388	1 651	7.3	-15.7	-9.6
Chemical products	3 977	4 320	4 753	3 750	8.6	10.0	5.4
Miscellaneous manufacturing	‡	‡	‡	‡	‡	‡	‡
Durable goods (p)	24 040	26 607	30 272	22 648	10.7	13.8	8.1
Non-durable goods (p)	35 151	37 769	39 345	29 601	7.4	4.2	1.0
TOTAL	**61 057**	**66 473**	**71 894**	**55 315**	**8.9**	**8.2**	**3.9**

‡ Confidential.
(p) Partial, excluding confidential data.
SOURCES: Statistics Canada (Cat. 31-001).
Direction de l'analyse de la conjoncture industrielle, MICT.

TOTAL CANADIAN EXPORTS LOADED IN QUÉBEC
25 PRINCIPAL PRODUCTS EXPORTED
1986-1989

RANK IN 1988	PRODUCT	1986	1987	1988	1989 (6 months)	1987/1986	1988/1987	1989/1988 (6 months)
		(millions of dollars)				(percentage change)		
1.	Newsprint	2 732.1	2 795.8	3 118.9	1 427.5	2.3	11.6	-10.2
2.	Aluminum and alloys	1 505.1	1 880.1	2 674.5	1 405.1	24.9	42.3	17.9
3.	Automobiles and chassis	1 914.3	974.6	1 958.9	1 178.6	-49.1	101.0	27.0
4.	Other equipment and telecommunications equipment	1 108.0	1 203.7	1 096.7	613.4	8.6	-8.9	25.1
5.	Aircraft engines and parts	676.4	808.4	802.6	527.0	19.5	-0.7	45.2
6.	Wood pulp and similar pulps	400.7	529.4	640.1	388.0	32.1	20.9	36.7
7.	Lumber	660.8	588.5	524.6	282.5	-10.9	-10.9	8.2
8.	Office machines and equipment	191.0	283.5	498.4	244.0	48.4	75.8	25.0
9.	Copper and alloys	369.1	419.4	496.4	327.9	13.6	18.4	34.1
10.	Entire aircraft with engines	279.5	251.0	345.6	139.8	-10.2	37.7	-12.7
11.	Fresh, refrigerated and frozen meat	407.4	386.9	344.2	176.1	-5.0	-11.0	-0.7
12.	Other measuring and control instruments	241.6	271.9	333.1	198.5	12.5	22.5	22.2
13.	Iron ore and concentrates	541.1	318.8	330.8	147.4	-41.1	3.8	-10.4
14.	Electricity	373.8	442.0	328.7	110.7	18.2	-25.6	-39.3
15.	Basic metal structures	282.4	297.5	321.7	169.9	5.3	8.1	1.8
16.	Other equipment and tools	272.9	342.6	309.9	167.1	25.5	-9.6	6.0
17.	Unfinished asbestos	314.9	265.8	283.6	149.0	-15.6	6.7	8.1
18.	Clothing and accessories	264.2	310.6	275.3	96.4	17.6	-11.4	-14.8
19.	Aircraft parts, excluding engines	411.5	433.7	243.9	99.6	5.4	-43.8	-22.7
20.	Other scrap and waste material	30.8	40.1	240.7	129.6	30.4	499.9	10.8
21.	Automobile parts, excluding engines	199.5	223.4	238.3	88.3	12.0	6.7	-27.3
22.	Printed matter	236.9	221.1	227.4	108.5	-6.7	2.9	16.9
23.	Other basic non-metallic mineral products	225.7	218.0	209.0	80.9	-3.4	-4.1	-26.3
24.	Trucks, road tractors and chassis	82.3	189.4	205.0	101.5	130.2	8.2	-7.8
25.	Other motor vehicles	115.9	122.4	199.5	80.3	5.6	63.1	6.1
	TOTAL 10 PRINCIPAL PRODUCTS	9 837.0	9 734.3	12 156.7	6 533.6	-1.0	24.9	14.5
	25 PRINCIPAL PRODUCTS	13 837.9	13 818.5	16 248.1	8 437.4	-0.1	17.6	9.2
	ALL PRODUCTS	**19 917.3**	**20 214.8**	**22 580.6**	**11 945.4**	**1.5**	**11.7**	**10.3**

SOURCES: Bureau de la Statistique du Québec, *Exportations du Canada chargées au Québec.*
Direction de l'analyse de la conjoncture industrielle, MICT.

QUÉBEC'S INTERNATIONAL EXPORTS
1986-1989

DESTINATION		1986	1987	1988	1989 (6 months)	1987/1986	1988/1987	1989/1988 (6 months)
		(millions of dollars)				(percentage change)		
United States		15 447.5	15 632.9	16 999.3	8 813.9	1.2	8.7	7.6
	%	77.6	77.3	75.3	73.8			
EEC		2 043.3	2 215.4	2 847.9	1 670.1	8.4	28.6	25.5
	%	10.3	11.0	12.6	14.0			
Japan		299.7	339.5	448.3	218.8	13.3	32.0	4.5
	%	1.5	1.7	2.0	1.8			
Other countries		2 126.8	2 027.0	2 285.1	1 242.6	-4.7	12.7	13.0
	%	10.7	10.0	10.1	10.4			
TOTAL		**19 917.3**	**20 214.8**	**22 580.6**	**11 945.4**	**1.5**	**11.7**	**10.3**
	%	**100.0**	**100.0**	**100.0**	**100.0**			

SOURCES: Bureau de la Statistique du Québec, *Exportations du Canada chargées au Québec.*
Direction de l'analyse de la conjoncture industrielle, MICT.

EMPLOYMENT, BY INDUSTRY
QUÉBEC
1986-1989

INDUSTRY	1986	1987	1988	1989 (11 months)	1987/1986	1988/1987	1989/1988 (11 months)
	(thousands)				(percentage change)		
Agriculture	79.4	74.2	68.7	57.1	-6.5	-7.4	-18.4
Other primary industries	43.7	40.9	40.3	45.0	-6.4	-1.5	12.5
Manufacturing	554.6	558.9	611.5	628.0	0.8	9.4	3.0
Construction	138.1	157.5	173.8	165.5	14.0	10.3	-5.2
Transportation, communication other utilities	214.6	226.4	226.2	222.3	5.5	-0.1	-2.2
Trade	506.1	513.2	512.7	538.3	1.4	-0.1	5.1
Finance, insurance and real estate	155.3	167.7	164.7	173.5	8.0	-1.8	4.6
Service	936.3	972.6	1 004.1	996.4	3.9	3.2	-0.7
Public administration	196.9	207.0	198.6	209.2	5.1	-4.1	5.2
ALL INDUSTRIES	**2 825.1**	**2 918.4**	**3 000.6**	**3 035.1**	**3.3**	**2.8**	**1.1**

SOURCES: Statistics Canada, *The Labour Force Survey* special compilations.
Direction de l'analyse de la conjoncture industrielle, MICT.

EMPLOYMENT - MANUFACTURING SECTOR
QUÉBEC
1986-1989

	1986	1987	1988	1989 (11 months)	1987/1986	1988/1987	1989/1988 (11 months)
	(thousands)				(percentage change)		
EMPLOYMENT							
Total	554.6	558.9	611.5	628.0	0.8	9.4	3.0
Men	386.3	394.0	432.0	438.8	2.0	9.6	2.0
Women	168.3	164.9	179.5	189.1	-2.0	8.9	5.2
FULL-TIME EMPLOYMENT							
Total	534.6	542.2	590.7	605.8	1.4	8.9	2.9
Men	379.5	387.6	424.2	430.3	2.1	9.4	1.9
Women	155.1	154.6	166.5	175.5	-0.3	7.7	5.3
PART-TIME EMPLOYMENT							
Total	20.0	16.7	20.8	21.9	-16.5	24.6	4.3
Men	6.8	6.4	7.8	8.5	-5.9	21.9	9.0
Women	13.2	10.3	13.0	13.5	-22.0	26.2	2.3

SOURCES: Statistics Canada, (Cat. 71-001) and special compilations.
Direction de l'analyse de la conjoncture industrielle, MICT.

AVERAGE HOURLY EARNINGS IN MANUFACTURING (INCLUDING OVERTIME)
EMPLOYEES PAID BY THE HOUR
QUÉBEC
1986-1989

INDUSTRY	1986	1987	1988	1989 (9 months)	1987/1986	1988/1987	1989/1988 (9 months)
	(dollars)				(percentage change)		
Foods and beverages	11.31	11.65	12.11	12.43	3.0	3.9	3.0
Tobacco products	18.89	20.18	21.45	22.90	6.8	6.3	8.1
Rubber and plastics products	10.37	10.46	10.59	11.53	0.9	1.2	9.3
Leather	7.22	7.54	7.77	7.96	4.5	3.1	2.8
Textiles	8.75	9.21	9.58	10.00	5.2	4.0	4.7
Knitting mills	7.67	7.42	7.63	8.05	-3.3	2.8	5.5
Clothing	7.72	7.29	7.59	8.19	-5.6	4.1	8.6
Wood	9.71	9.90	10.24	10.89	2.0	3.4	7.2
Furniture	7.98	8.97	9.10	9.41	12.4	1.4	3.4
Paper	14.89	15.38	16.04	16.65	3.3	4.3	4.4
Printing and publishing	12.81	12.87	13.90	14.28	0.5	8.0	3.9
Primary metals	15.06	15.33	15.77	17.08	1.8	2.9	9.1
Metal fabricating	11.05	11.24	11.96	12.62	1.7	6.4	7.1
Machinery	10.61	11.53	12.24	12.96	8.7	6.2	7.4
Transportation equipment	12.69	12.94	13.60	14.22	2.0	5.1	5.4
Electrical products	11.10	11.80	12.23	12.79	6.3	3.6	4.9
Non-metallic mineral products	12.26	12.57	12.86	13.50	2.5	2.3	6.0
Petroleum product	15.69	16.08	13.62	12.80	2.5	-15.3	-5.8
Chemical product	12.22	12.69	13.10	13.80	3.8	3.2	6.3
Miscellaneous manufacturing	7.46	7.88	8.89	9.06	5.6	12.8	1.6
Durable goods	11.14	11.72	12.20	12.91	5.2	4.1	6.7
Non-durable goods	10.65	10.90	11.54	12.10	2.3	5.9	5.4
TOTAL	**10.85**	**11.25**	**11.84**	**12.47**	**3.7**	**5.2**	**6.0**

N.B. For the years prior to 1987, the data for the various industries and for the totals have been corrected using Statistics Canada adjustment factors.

SOURCES: Statistics Canada (Cat. 72-002), SIC, 1970.
Direction de l'analyse de la conjoncture industrielle, MICT.

AVERAGE HOURLY EARNINGS (1)
MANUFACTURING
JUNE 1989
(IN DOLLARS)

INDUSTRY	QUÉBEC	ONTARIO	CANADA	U.S.(1) (C$)	QUÉ/CAN.	QUÉ/ONT.	QUÉ/U.S.
Food and beverages	12.33	13.18	12.21	11.23	101.0	93.6	109.8
Tobacco products	22.69	23.00	22.79	19.75	99.6	98.7	114.9
Rubber and plastics products	11.57	11.31	11.48	11.26	100.8	102.3	102.8
Leather	7.96	8.81	8.36	7.89	95.2	90.4	100.9
Textiles	10.19	12.18	11.12	9.17	91.6	83.7	111.1
Knitting mills	8.20	8.28	8.17	n.a.	100.4	99.0	n.a.
Clothing	8.10	8.40	7.99	n.a.	101.4	96.4	n.a.
Wood	10.92	11.26	13.06	10.62	83.6	97.0	102.8
Furniture	9.48	10.87	10.24	9.85	92.6	87.2	96.2
Paper	17.02	15.90	17.25	14.26	98.7	107.0	119.4
Printing and publishing	14.60	13.24	13.42	12.87	108.8	110.3	113.4
Primary metals	17.41	17.17	17.21	14.76	101.2	101.4	118.0
Metal fabricating	12.39	13.53	13.38	12.58	92.6	91.6	98.5
Machinery	13.04	13.83	13.57	13.57	96.1	94.3	96.1
Transportation equipment	14.12	16.27	15.64	16.36	90.3	86.8	86.3
Electrical products	12.73	12.19	12.39	12.44	102.7	104.4	102.3
Non-metallic mineral products	13.50	15.10	14.49	12.87	93.2	89.4	104.9
Petroleum products	13.18	16.93	16.45	18.26	80.1	77.8	72.2
Chemical products	13.88	14.34	14.27	15.54	97.3	96.8	89.3
Miscellaneous manufacturing	9.02	11.94	10.86	9.86	83.1	75.5	91.5
Durable goods	12.88	14.47	14.08	13.16	91.5	89.0	97.9
Non-durable goods	12.27	12.84	12.65	11.61	97.0	95.6	105.7
TOTAL	**12.55**	**13.80**	**13.41**	**12.51**	**93.6**	**90.9**	**100.3**

n.a.: Not available.
(1) Conversion rate: C$1.1984 = US$1.00 (June 1989 average).
SOURCES: Statistics Canada (Cat. 72-002, August 1989), SIC 1970.
U.S. Department of Commerce, *Survey of Current Business*, August 1989.
Bank of Canada Review, August 1989.
Direction de l'analyse de la conjoncture industrielle, MICT.

AVERAGE WEEKLY EARNINGS IN MANUFACTURING (INCLUDING OVERTIME)
ALL EMPLOYEES
QUÉBEC
1986-1989

INDUSTRY	1986	1987	1988	1989 (9 months)	1987/1986	1988/1987	1989/1988 (9 months)
	(dollars)				(percentage change)		
Food and beverages	458.69	478.06	494.10	511.49	4.2	3.4	3.6
Tobacco products	714.19	746.84	816.66	871.58	4.6	9.3	8.2
Rubber and plastics products	438.67	435.27	450.87	479.17	-0.8	3.6	6.5
Leather	304.52	316.76	327.29	337.61	4.0	3.3	3.8
Textiles	391.46	410.45	436.56	451.72	4.9	6.4	3.5
Knitting mills	316.11	335.20	339.03	356.90	6.0	1.1	5.6
Clothing	320.06	305.78	307.05	331.05	-4.5	0.4	8.4
Wood	409.17	413.08	436.46	457.80	1.0	5.7	6.1
Furniture	344.91	379.21	379.43	397.26	9.9	0.1	5.3
Paper	617.64	638.73	667.99	693.80	3.4	4.6	4.6
Printing and publishing	456.96	492.24	538.23	545.20	7.7	9.3	2.1
Primary metals	643.00	671.39	684.56	724.80	4.4	2.0	6.8
Metal fabricating	454.94	468.60	497.63	520.66	3.0	6.2	5.9
Machinery	480.15	521.30	542.46	574.42	8.6	4.1	7.7
Transportation equipment	572.00	594.30	620.01	642.19	3.9	4.3	5.0
Electrical products	525.91	552.21	583.23	606.30	5.0	5.6	4.6
Non-metallic mineral products	510.32	534.11	553.81	575.79	4.7	3.7	4.8
Petroleum products	701.44	761.22	820.76	862.16	8.5	7.8	6.0
Chemical products	551.44	589.04	612.74	636.90	6.8	4.0	4.6
Miscellaneous manufacturing	332.77	355.27	390.85	405.80	6.8	10.0	4.2
Durable goods	489.88	518.94	541.83	567.84	5.9	4.4	5.9
Non-durable goods	436.33	456.82	482.64	504.80	4.7	5.7	5.1
TOTAL	**457.56**	**481.93**	**507.65**	**531.87**	**5.3**	**5.3**	**5.6**

N.B. For the years prior to 1987, the data for the various industries and for the totals have been corrected using Statistics Canada adjustment factors.

SOURCES: Statistics Canada (Cat. 72-002) SIC, 1970.
Direction de l'analyse de la conjoncture industrielle, MICT.

PERSON-DAYS LOST IN WORK STOPPAGES
MANUFACTURING
QUÉBEC
1986-1989

INDUSTRY	1986	1987	1988	1989 (10 months)	1987/1986	1988/1987	1989/1988 (10 months)
	(number)				(percentage change)		
Food and beverages	77 585	98 994	9 917	41 616	27.6	-90.0	368.9
Tobacco products	0	0	0	0	0.0	0.0	0.0
Rubber and plastics products	12 700	10 684	5 237	22 746	-15.9	-51.0	382.9
Leather	0	6 868	75	0	0.0	0.0	0.0
Textiles	10 314	8 780	9 690	13 406	-14.9	10.4	35.1
Knitting mills	1 530	4 905	0	0	220.6	0.0	0.0
Clothing	51 684	90 576	14 181	6 953	75.2	-84.3	-51.0
Wood	44 370	16 290	52 382	24 973	-63.3	221.6	-42.4
Furniture	21 959	17 399	27 597	14 943	-20.8	58.6	-34.4
Paper	18 449	62 671	39 801	12 870	239.7	-36.5	-67.7
Printing and publishing	8 168	31 191	7 875	3 826	281.9	-74.8	0.0
Primary metals	118 266	47 496	38 916	579	-59.8	-18.1	-98.5
Metal fabricating	47 480	25 372	29 874	27 114	-46.6	17.7	1.5
Machinery	53 362	79 388	10 520	14 790	48.8	-86.7	40.6
Transportation equipment	9 569	21 510	6 656	11 470	124.8	-69.1	71.1
Electrical products	46 147	50 691	22 469	65 441	9.8	-55.7	174.1
Non-metallic mineral products	36 249	5 369	3 193	23 954	-85.2	-40.5	1025.1
Petroleum products	0	0	0	500	0.0	0.0	0.0
Chemical products	3 808	6 049	113 902	4 979	58.8	1 783.0	-95.3
Miscellaneous manufacturing	4 424	0	0	10 549	0.0	0.0	0.0
TOTAL	**566 064**	**584 233**	**392 285**	**300 709**	**3.2**	**-32.9**	**-17.9**

SOURCES: Ministère du Travail, *Grèves et lock-out au Québec*, SIC, 1970.
Direction de l'analyse de la conjoncture industrielle, MICT.

LABOUR DISPUTES
MANUFACTURING SECTOR
QUÉBEC
1986-1989

INDUSTRY	% OF ESTIMATED WORKING DAYS				PERSON-DAYS LOST
	1986	1987	1988	1989 (9 months)	1989 (9 months)
Food and beverages	0.6	0.7	0.1	0.2	34 305
Tobacco products	0.0	0.0	0.0	0.0	0
Rubber and plastics products	0.3	0.2	0.1	0.5	22 806
Leather	0.0	0.3	0.0	0.0	0
Textiles	0.1	0.1	0.1	0.2	13 550
Knitting mills	0.1	0.2	0.0	0.0	0
Clothing	0.3	0.6	0.1	0.1	6 953
Wood	0.6	0.2	0.7	0.3	28 406
Furniture	0.3	0.3	0.5	0.3	15 441
Paper	0.2	0.6	0.4	0.1	12 702
Printing and publishing	0.1	0.4	0.1	0.0	0
Primary metals	1.8	0.7	0.6	0.0	579
Metal fabricating	0.6	0.3	0.3	0.3	24 009
Machinery	1.4	1.7	0.2	0.2	15 016
Transportation equipment	0.1	0.2	0.1	0.1	11 420
Electrical products	0.6	0.6	0.3	1.0	85 839
Non-metallic mineral products	1.0	0.1	0.1	0.6	21 471
Petroleum products	0.0	0.0	0.0	0.1	500
Chemical products	0.1	0.1	1.7	0.1	3 960
Miscellaneous manufacturing	0.1	0.0	0.0	0.2	13 494
Durable goods	0.7	0.5	0.3	0.3	202 181
Non-durable goods	0.2	0.4	0.3	0.1	108 270
TOTAL	**0.4**	**0.4**	**0.3**	**0.2**	**310 451**

SOURCES: Statistics Canada (Cat. 72-002).
Ministère du Travail du Québec, special compilations; SIC, 1970.
Direction de l'analyse de la conjoncture industrielle, MICT.

CAPACITY UTILIZATION RATES
CANADA
1986-1989

INDUSTRY	1986	1987	1988	1989	
				1rst Q.	2nd Q.
Food	79.9	80.5	79.6	77.6	77.7
Beverages	54.8	52.9	54.0	51.5	52.6
Tobacco products	64.7	64.0	65.1	64.5	66.4
Rubber products	77.5	71.4	70.1	73.4	74.1
Plastics products	93.1	93.5	89.9	85.1	82.4
Leather	92.0	87.6	78.4	77.0	79.4
Primary textiles	90.3	96.5	96.7	96.5	95.2
Textile products	84.1	85.9	86.2	82.7	83.1
Clothing	90.3	91.0	86.1	86.9	86.8
Wood	85.4	94.2	88.6	83.2	83.7
Furniture	72.6	74.2	73.6	73.2	75.5
Paper	88.6	90.9	90.7	89.0	86.1
Printing and publishing	90.8	90.5	90.8	89.6	89.0
Primary metals	82.8	90.0	96.9	96.1	96.6
Metal fabricating	74.2	76.4	77.6	78.9	79.5
Machinery	70.0	71.8	77.5	76.8	76.0
Transportation equipment	77.9	69.6	71.5	70.8	68.4
Electrical products	75.6	85.2	96.4	96.2	96.3
Non-metallic mineral products	68.3	72.5	73.6	74.5	72.7
Petroleum products	67.0	69.7	73.9	76.3	77.0
Chemical products	84.6	89.2	93.0	94.8	94.1
Miscellaneous manufacturing	80.6	76.4	72.7	70.2	70.7
Durable goods	76.9	79.4	82.6	81.8	81.5
Non-durable goods	83.4	84.6	84.5	83.7	83.0
TOTAL	**80.0**	**81.8**	**83.5**	**82.7**	**82.2**

SOURCES: Statistics Canada (Cat. 31-003, second quarter of 1989).
Direction de l'analyse de la conjoncture industrielle, MICT.

CAPITAL SPENDING IN MANUFACTURING
BY INDUSTRY
QUÉBEC
1986-1989

INDUSTRY	1986	1987	1988*	1989**	1987/1986	1988/1987	1989/1988
	(millions of dollars)				(percentage change)		
Food and beverages	202.3	253.1	347.6	346.5	25.1	37.3	-0.3
Tobacco products	34.8	28.8	31.5	‡	-17.2	9.4	‡
Rubber products	80.5	67.4	83.7	126.0	-16.3	24.2	50.5
Leather	3.6	6.0	4.6	4.0	66.7	-23.3	-13.0
Textiles	78.1	89.0	88.1	109.3	14.0	-1.0	24.1
Knitting mills	12.4	14.4	10.1	‡	16.1	-29.9	‡
Clothing	19.3	25.0	22.6	25.8	29.5	-9.6	14.1
Wood	86.4	99.6	178.1	120.4	15.3	78.8	-32.4
Furniture	26.3	37.2	30.8	21.4	41.4	-17.2	-30.5
Paper	1 023.0	1 161.0	1 050.1	1 727.5	13.5	-9.6	64.5
Printing and publishing	89.8	75.7	85.9	84.3	-15.7	13.5	-1.9
Primary metals	576.6	490.6	701.6	1 203.0	-14.9	43.0	71.5
Metal fabricating	93.3	111.7	110.1	102.0	19.7	-1.4	-7.4
Machinery	70.0	81.6	163.9	183.8	16.6	100.9	12.1
Transportation equipment	137.4	284.0	489.7	454.0	106.7	72.4	-7.3
Electrical products	155.5	141.1	172.5	224.3	-9.3	22.3	30.0
Non-metallic mineral products	95.4	95.3	106.3	240.3	-0.1	11.5	126.1
Petroleum products	89.5	120.0	102.0	202.7	34.1	-15.0	98.7
Chemical products	402.1	347.7	365.3	547.5	-13.5	5.1	49.9
Miscellaneous manufacturing	51.2	40.9	35.6	53.9	-20.1	-13.0	51.4
Durable goods	1 240.9	1 341.1	1 953.0	2 549.2	8.1	45.6	30.5
Non-durable goods	2 086.6	2 229.0	2 227.1	3 284.9	6.8	-0.1	47.5
Capitals goods charged to operating expenses	386.4	427.0	466.2	593.2	‡	‡	‡
TOTAL	3 713.9	3 997.1	4 646.3	6 427.3	7.6	16.2	38.3

* Preliminary.
** Estimates revised at mid-year.
‡ Confidential data.
SOURCES: Statistics Canada, *Private and Public Investment in Canada* (Cat. 61-205 and 61-206) SIC, 1970.
Direction de l'analyse de la conjoncture industrielle, MICT.

RESEARCH AND DEVELOPMENT EXPENDITURES
QUÉBEC – CANADA
1982-1989

	1982	1983	1984	1985	1986	1987	1988E	1989E
	(millions of dollars)							
QUÉBEC								
Main sectors								
Transportation equipment	189	179	197	217	224	293	305	325
Electrical and electronic products	103	103	137	175	194	220	240	265
Chemical products	54	64	64	67	70	75	85	100
Manufacturing R & D	478	463	570	649	653	770	840	910
Industrial R & D	568	575	712	851	936	1 063	1 160	1 260
CANADA								
Manufacturing R & D	1 958	2 021	2 256	2 602	2 749	2 892	3 117	3 302
Industrial R & D	2 489	2 585	2 994	3 610	3 950	4 069	4 391	4 640
QUÉBEC/CANADA RATIOS								
Manufacturing R & D	24.4	22.9	25.3	24.9	23.8	26.6	26.9	27.6
Industrial R & D	22.8	22.2	23.8	23.6	23.7	26.1	26.4	27.2

E: Estimates (data respecting Québec).
SOURCES: Statistics Canada, *Industrial Research and Development Statistics, 1987*, (Cat. 88-202).
Direction de l'analyse de la conjoncture industrielle, MICT.

AVERAGE ANNUAL RATES OF CHANGE IN LABOUR PRODUCTIVITY
MAIN INDUSTRIALIZED COUNTRIES
MANUFACTURING

COUNTRY	1960-1973	1973-1979	1979-1988 (1)
Canada	4.5	2.1	2.2
United States	3.2	1.4	3.3
EEC			
Belgium	6.9	6.0	4.8
France	6.4	4.6	3.1
West Germany	5.8	4.3	2.6
Italy	6.4	5.7	4.1
Netherlands	7.4	5.5	3.5
United Kingdom	4.2	1.2	4.7
Japan	10.3	5.5	5.8
OTHER COUNTRIES			
Denmark	6.4	4.2	1.1
Norway	4.3	2.2	2.3
Sweden	6.4	2.6	3.0

(1) For Belgium and Norway, data for 1988 are not available.

SOURCES: Bureau of Labor Statistics, U.S. Department of Labor, *International Comparisons of Manufacturing Productivity and Labor Costs Trends, 1988*, June 1989.
Direction de l'analyse de la conjoncture industrielle, MICT.

AVERAGE ANNUAL RATES OF CHANGE IN UNIT LABOUR COSTS
MAIN INDUSTRIALIZED COUNTRIES
MANUFACTURING

	1979-1988		1979-1986		1987		1988	
COUNTRY	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Canada	5.2	4.6	5.8	3.3	2.7	7.7	2.9	10.9
United States	2.2	2.2	2.9	2.9	-1.2	-1.2	0.3	0.3
EEC								
Belgium	1.1	-1.9	1.5	-4.5	-1.6	17.7	n.a.	n.a.
France	6.7	2.8	8.4	1.1	3.3	19.0	-1.6	-0.8
West Germany	2.7	3.2	3.2	0.7	2.6	23.8	-0.5	1.8
Italy	8.5	3.2	9.9	1.1	3.8	19.4	3.4	2.9
Netherlands	0.9	1.1	1.0	-1.8	2.2	23.5	-1.4	1.0
United Kingdom	4.8	2.7	5.7	0.3	0.0	11.7	2.9	11.8
Japan	-1.0	5.0	-0.3	3.5	-5.1	10.4	-2.1	10.5
OTHER COUNTRIES								
Denmark	6.1	3.2	6.1	-0.2	10.1	30.1	1.8	3.4
Norway	7.6	3.9	7.4	1.3	9.3	23.3	n.a.	n.a.
Sweden	5.8	1.7	6.5	-1.0	2.6	15.3	4.3	7.9

n.a.: Not available.
(1) Expressed in the domestic currency.
(2) Expressed in U.S. dollars.
SOURCES: Bureau of Labor Statistics, U.S. Department of Labor, *International Comparisons of Manufacturing Productivity and Labor Costs Trends, 1988*, June 1989.
Direction de l'analyse de la conjoncture industrielle, MICT.

CHANGES IN LABOUR PRODUCTIVITY, PRODUCTION WAGES AND UNIT LABOUR COSTS
QUÉBEC
1981-1988

INDUSTRY	LABOUR PRODUCTIVITY		AVERAGE HOURLY WAGE		UNIT LABOUR COSTS	
	Index (1981=100)	Average growth rate	Index (1981=100)	Average growth rate	Index (1981=100)	Average growth rate
	1988	1981-1988	1988	1981-1988	1988	1981-1988
		%		%		%
Food	103.0	0.4	141.2	5.1	137.1	4.6
Beverages	89.4	-1.6	136.3	4.5	152.4	6.2
Tobacco products	190.9	9.7	179.8	8.7	94.2	-0.8
Rubber products	‡	‡	‡	‡	‡	‡
Plastics products	113.4	1.8	142.3	5.2	125.5	3.3
Leather	112.0	1.6	138.6	4.8	123.8	3.1
Primary textiles	126.1	3.4	153.2	6.3	121.5	2.8
Textile products	104.5	0.6	134.3	4.3	128.5	3.6
Clothing	107.5	1.0	119.9	2.6	111.5	1.6
Wood	135.8	4.5	138.4	4.8	101.9	0.3
Furniture	103.4	0.5	125.2	3.3	121.0	2.8
Paper	119.9	2.6	152.6	6.2	127.3	3.5
Printing and publishing	88.3	-1.8	145.5	5.5	164.8	7.4
Primary metals	157.5	6.7	153.7	6.3	97.6	-0.3
Metal fabricating	95.7	-0.6	140.0	4.9	146.3	5.6
Machinery	87.0	-2.0	128.9	3.7	148.3	5.8
Transportation equipment	128.1	3.6	131.8	4.0	102.9	0.4
Electrical products	118.6	2.5	152.5	6.2	128.5	3.6
Non-metallic mineral products	109.0	1.2	137.3	4.6	125.9	3.3
Petroleum products	72.7	-4.5	132.4	4.1	182.2	8.9
Chemical products	116.5	2.2	142.8	5.2	122.6	3.0
Miscellaneous manufacturing	‡	‡	‡	‡	‡	‡
TOTAL	**104.0**	**0.6**	**139.2**	**4.8**	**133.8**	**4.2**

‡ Confidential data.

SOURCES: Bureau de la Statistique du Québec, *Statistiques principales des manufacturiers québécois: estimations 1988.*
Direction de l'analyse de la conjoncture industrielle, MICT.

BUSINESS BANKRUPTCIES IN THE MANUFACTURING SECTOR QUÉBEC – ONTARIO – CANADA 1986-1989

	1986	1987	1988	1989 (10 months)	1987/1986	1988/1987	1989/1988 (10 months)
NUMBER					(percentage change)		
Québec	217	219	262	257	0.9	19.6	23.0
Ontario	169	166	166	132	-1.8	0.0	-7.7
Canada	644	622	656	562	-3.4	5.5	3.9
Qué./Can. %	33.7	35.2	39.9	45.7			
Ont./Can. %	26.2	26.7	25.3	23.5			
LIABILITIES ('000$)							
Québec	70 584	52 381	99 552	171 160	-25.8	90.1	92.7
Ontario	38 009	68 863	63 494	41 376	81.2	-7.8	-25.8
Canada	203 779	185 663	241 983	279 148	-8.9	30.3	31.9
Qué./Can. %	34.6	28.2	41.1	61.3			
Ont./Can. %	18.7	37.1	26.2	14.8			

SOURCES: Consumer and Corporate Affairs Canada, Office of the Superintendent of Bankruptcy, *Insolvency Bulletin.*
Direction de l'analyse de la conjoncture industrielle, MICT.

CONSUMER PRICE INDEX
ANNUAL CHANGE
1986-1989

	MONTRÉAL				QUÉBEC			
	1986	1987	1988	1989 (11 months)	1986	1987	1988	1989 (11 months)
ALL-ITEMS	**4.9**	**4.5**	**3.8**	**4.5**	**4.9**	**3.9**	**3.6**	**3.9**
ALL-ITEMS excluding food	4.4	4.3	4.1	4.5	4.4	3.7	3.7	4.0
ALL-ITEMS excluding food and energy	5.9	4.3	4.4	4.8	5.6	3.8	3.9	4.1
Food	6.7	5.2	2.9	4.4	6.9	4.4	3.1	3.4
Energy	-7.8	3.6	2.2	2.2	-5.4	2.5	1.2	3.4
Housing	3.1	4.3	5.0	4.8	3.3	3.0	3.9	4.2
Clothing	3.2	4.6	4.3	3.6	3.0	4.3	4.8	3.1
Transportation	3.1	3.2	1.7	3.6	2.7	3.3	1.1	2.8
Health and personal care	4.8	5.4	4.0	4.3	4.8	5.3	4.3	4.6
Recreation , reading and education	4.4	5.3	4.6	4.0	4.7	4.8	4.2	3.7
Tobacco products and alcoholic beverages	16.0	4.9	4.6	7.5	14.8	5.4	4.9	7.1
GOODS								
Durable goods	5.6	3.3	3.5	4.6	4.5	3.2	3.7	4.3
Semi-durable goods	3.0	4.5	4.7	4.1	3.0	4.3	4.8	3.5
Non-durable goods	4.5	4.4	2.9	4.3	5.3	4.1	2.9	4.0
SERVICES	5.4	4.8	4.7	4.9	5.1	3.8	3.7	4.1

SOURCES: Statistics Canada (Cat. 62-010) and CANSIM.
Direction de l'analyse de la conjoncture industrielle, MICT.

SALES AND STOCKS (P)
WHOLESALE TRADE
QUÉBEC – ONTARIO – CANADA
1986-1989

		1986/1985	1987/1986	1988/1987	1989/1988 (8 months)
		(percentage change)			
QUÉBEC	**Total sales**	8.4	10.4	11.3	0.5
	Stocks	11.0	11.7	10.4	-4.0
	Stocks/sales	1.62	1.54	1.59	1.40
ONTARIO	**Total sales**	16.4	14.7	9.0	6.2
	Stocks	9.7	4.4	5.9	3.8
	Stocks/sales	1.60	1.50	1.44	1.41
CANADA	**Total sales**	11.5	13.8	9.2	3.7
	Stocks	7.2	6.1	6.1	3.4
	Stocks/sales	1.60	1.58	1.52	1.43
SALES, BY MAJOR TRADE GROUPS:					
Food		2.3	11.7	5.5	6.9
Tobacco, drugs, and toilet preparations		9.3	6.7	0.7	-4.1
Apparel, dry goods, furniture and general merchandise		11.4	13.5	6.9	0.1
Motor vehicles and accessories		14.6	5.7	1.1	0.2
Farm machinery, equipment and supplies		18.1	0.2	-12.6	-25.7
Other machinery, equipment and supplies (1)		14.9	23.3	17.2	4.8
Metal, hardware, plumbing and heating equipment		5.3	14.3	14.4	10.1
Lumber and building materials		24.7	15.7	4.4	-1.9
Other wholesalers (2)		9.5	13.2	14.6	9.8

(1) Includes: Electrical machinery, equipment and supplies, n.e.s.
(2) Includes: Farm products (excluding grain); paper and paper products; scrap and waste materials; wholesalers, n.e.s.
(P) Preliminary cumulated data.
SOURCES: Statistics Canada (Cat. 63-008).
Direction de l'analyse de la conjoncture industrielle, MICT.

RETAIL SALES — QUÉBEC
1986-1989

KIND OF BUSINESS	1986	1987	1988	1989 (9 months)	1987/1986	1988/1987	1989/1988 (9 months)
	(millions of dollars)				(percentage change)		
DURABLE GOODS	9 172	10 775	11 665	8 829	17.5	8.3	-1.4
Motor vehicle dealers	6 846	8 116	8 846	6 728	18.5	9.0	-2.6
Used car dealers	308	360	411	313	16.7	14.1	-1.8
Automotive parts a d accessories stores	619	692	771	597	11.7	11.4	12.7
Household furniture stores	521	620	676	488	19.0	9.0	-3.6
Household appliance stores	107	139	168	131	30.0	21.0	8.3
Furniture, TV, radio and appliance stores	590	662	599	456	12.2	-9.6	0.1
Jewellery stores	179	185	194	116	3.6	4.7	-1.2
SEMI-DURABLE GOODS	7 203	7 795	8 418	6 118	8.2	8.0	5.9
Department stores	2 403	2 460	2 549	1 709	2.4	3.6	2.3
General merchandise stores	300	342	350	240	14.0	2.3	2.4
General stores	296	319	376	321	7.9	17.8	20.1
Men's clothing stores	373	401	408	263	7.3	1.8	-1.1
Women's clothing stores	809	883	932	683	9.2	5.5	4.3
Family clothing stores	713	751	827	641	5.3	10.2	16.1
Speciality shoe stores	80	79	98	90	-0.9	23.6	41.1
Family shoe stores	435	458	474	318	5.5	3.4	-0.3
Hardware stores	509	607	677	536	19.2	11.6	6.5
Book and stationery stores	202	223	276	201	10.8	23.6	7.6
Sporting goods and accessories stores	596	696	824	666	16.7	18.4	6.4
Personnal accessories stores	488	576	628	449	18.1	9.0	4.2
NON-DURABLE GOODS	11 284	12 190	12 765	9 591	8.0	4.7	2.0
Combination stores (groceries and meat)	6 189	6 441	6 535	4 938	4.1	1.5	2.2
Grocery, confectionery and sundries stores	2 331	2 777	3 047	2 232	19.1	9.7	-1.4
All other food stores	987	1 094	1 164	879	10.8	6.4	2.5
Variety stores	372	357	335	209	-4.0	-6.1	-11.1
Pharmacies	1 282	1 382	1 547	1 222	7.8	11.9	10.0
Florists	123	139	137	111	13.6	-1.7	11.1
SERVICES	3 605	4 223	4 464	3 413	17.1	5.7	2.7
Service sations	2 992	3 523	3 734	2 900	17.7	6.0	4.6
Garages	613	701	730	513	14.3	4.2	-6.9
ALL OTHER STORES	3 330	3 882	4 304	3 210	16.6	10.8	7.1
TOTAL RETAIL SALES	**34 593**	**38 866**	**41 616**	**31 161**	**12.4**	**7.1**	**2.3**

SOURCES: Statistics Canada (Cat. 63-005).
Direction de l'analyse de la conjoncture industrielle, MICT.

PERSONAL CONSUMER SPENDING
QUÉBEC
1986-1989

	1986	1987	1988	1989 (6 months)	1987/1986	1988/1987	1989/1988 (6 months)
	(millions of dollars)				(percentage change)		
GOODS	40 193	43 984	47 035	23 440	9.4	6.9	4.6
Durable goods	10 924	12 526	13 541	6 897	14.7	8.1	2.0
Semi-durable goods	7 653	8 405	9 058	4 175	9.8	7.8	7.2
Non-durable goods	21 616	23 053	24 436	12 368	6.6	6.0	5.2
SERVICES	31 495	34 470	37 341	20 196	9.4	8.3	9.8
TOTAL GOODS AND SERVICES	**71 688**	**78 454**	**84 376**	**43 636**	**9.4**	**7.5**	**7.0**

SOURCES: Bureau de la Statistique du Québec, *Comptes économiques du Québec*.
Direction de l'analyse de la conjoncture industrielle, MICT.

SOURCES OF FINANCING
CONSUMER SPENDING
QUÉBEC
1986-1989

	1986	1987	1988	1989 (6 months)	1987/1986	1988/1987	1989/1988 (6 months)
	(millions of dollars)				(percentage change)		
PERSONAL DISPOSABLE INCOME	81 014	87 262	93 112	49 732	7.7	6.7	11.8
CONSUMER CREDIT	12 085	14 533	16 482	16 919 (1)	20.3	13.4	7.7
PERSONAL SAVINGS	8 246	7 520	7 277	5 265	-8.8	-3.2	75.4

(1) Annualized quarterly data.
SOURCES: Bureau de la Statistique du Québec, *Comptes économiques du Québec*.
Direction de l'analyse de la conjoncture industrielle, MICT.

LEADING INDICATORS
CONSUMER SPENDING
QUÉBEC
1986-1989

	Unit	1986	1987	1988	1989	1987/1986	1988/1987	1989/1988
Savings rate	%	10.2	8.6	7.8	10.6 (1)			
Total household debt ratio (6)	%	46.4	53.0	63.1	61.8 (1)			
Housing starts	Number	60 348	74 179	58 062	35 914 (2)	22.9	-21.7	-17.3
Personal bankruptcies	Number	6 497	7 730	9 779	9 205 (3)	19.0	26.5	15.9
Liabilities	$'000	225 087	148 867	227 772	n.a.	-33.9	53.0	n.a.
Index of consumer purchasing intentions	1961=100							
I		112.39	152.23	139.75	107.19	35.4	-8.2	-23.3 (4)
II		136.05	148.90	145.99	92.11	9.4	-2.0	-36.9
III		128.15	147.01	112.85	108.58	14.7	-23.2	-3.8
IV		141.08	128.94	132.71	n.a.	-8.6	2.9	n.a.
Bank rate	%							
I		10.44	7.14	8.78	12.40			
II		8.84	8.59	9.44	12.33			
III		8.63	9.57	10.54	12.36			
IV		8.49	8.66	11.17	12.47 (5)			

n.a.: Not available.
(1) 6 months.
(2) 9 months.
(3) 10 months.
(4) Change compared to the same quarter of the preceding year.
(5) Rate for the first week of November.
(6) Total household debt = consumer loans + residential mortgage loans.
SOURCES: Bureau de la Statistique du Québec.
Statistics Canada.
CHMC.
Bank of Canada Review.
Consumer and Corporate Affairs Canada.
Direction de l'analyse et de la conjoncture industrielle, MICT.

EMPLOYMENT IN THE TRADE SECTOR
QUÉBEC
1986-1989

	1986	1987	1988	1989 (11 months)	1987/1986	1988/1987	1989/1988 (11 months)
	(thousands)				(percentage change)		
WHOLESALE TRADE							
EMPLOYMENT							
Total	137.3	127.9	127.8	145.4	-6.8	-0.1	13.9
Men	102.0	98.0	94.0	106.2	-3.9	-4.1	13.5
Women	35.0	30.0	34.0	39.4	-14.3	13.3	16.2
FULL-TIME EMPLOYMENT							
Total	129.0	120.0	120.0	136.0	-7.0	0.0	13.1
Men	99.0	94.0	90.0	102.3	-5.1	-4.3	13.8
Women	30.0	26.0	30.0	33.7	-13.3	15.4	11.2
PART-TIME EMPLOYMENT							
Total	8.0	8.0	8.0	9.5	0.0	0.0	43.9
Men	3.0	4.0	4.0	3.9	33.3	0.0	11.4
Women	5.0	4.0	4.0	5.5	-20.0	0.0	71.9
RETAIL TRADE							
EMPLOYMENT							
Total	368.6	385.3	384.9	393.0	4.5	-0.1	2.2
Men	210.0	205.0	207.0	214.5	-2.4	1.0	3.7
Women	158.0	179.0	178.0	178.4	13.3	-0.6	0.5
FULL-TIME EMPLOYMENT							
Total	282.0	296.0	290.0	295.7	5.0	-2.0	2.1
Men	178.0	178.0	173.0	179.2	0.0	-2.8	3.6
Women	104.0	117.0	117.0	116.5	12.5	0.0	0.0
PART-TIME EMPLOYMENT							
Total	87.0	90.0	95.0	97.4	3.4	5.6	2.7
Men	32.0	27.0	34.0	35.5	-15.6	25.9	4.7
Women	54.0	62.0	61.0	61.9	14.8	-1.6	1.6
TRADE SECTOR AS A WHOLE							
EMPLOYMENT							
Total	506.1	513.2	512.7	538.3	1.4	-0.1	5.1
Men	312.8	303.3	301.1	320.5	-3.0	-0.7	6.6
Women	193.3	209.9	211.6	218.0	8.6	0.8	3.1
FULL-TIME EMPLOYMENT							
Total	411.1	415.4	409.9	431.6	1.0	-1.3	5.4
Men	277.4	272.1	263.2	281.4	-1.9	-3.3	7.1
Women	133.7	143.3	146.8	150.3	7.2	2.4	2.3
PART-TIME EMPLOYMENT							
Total	95.0	97.9	102.8	106.8	3.1	5.0	4.3
Men	35.4	31.2	37.9	39.2	-11.9	21.5	4.0
Women	59.6	66.7	64.9	67.5	11.9	-2.7	4.7

SOURCES: Statistics Canada (Cat. 71-001) and special compilation.
Direction de l'analyse de la conjoncture industrielle, MICT.

AVERAGE EARNINGS IN THE TRADE SECTOR
QUÉBEC
1986-1989

	1986	1987	1988	1989 (9 months)	1987/1986	1988/1987	1989/1988 (9 months)
	(dollars)				(percentage change)		
AVERAGE WEEKLY EARNINGS (1)							
WHOLESALE TRADE	427.48	434.54	449.50	465.39	1.7	3.4	3.4
RETAIL TRADE	263.92	270.36	279.95	286.66	2.4	3.5	2.3
AVERAGE HOURLY EARNINGS (2)							
WHOLESALE TRADE	9.13	9.26	9.66	9.66	1.4	4.3	0.0
RETAIL TRADE	7.54	7.85	8.17	8.36	4.1	4.1	2.5

(1) For all employees, including overtime.
(2) For employees paid by the hour, including overtime.
N.B. For the years prior to 1987, the data for the various industries and for the totals have been corrected using Statistics Canada's adjustment factors.
SOURCES: Statistics Canada (Cat. 72-002) SIC, 1970.
Direction de l'analyse de la conjoncture industrielle, MICT.

PERSON-DAYS LOST IN WORK STOPPAGES AND NUMBER OF WORKERS INVOLVED
TRADE SECTOR
QUÉBEC
1986-1989

	1986	1987	1988	1989 (10 months)	1987/1986	1988/1987	1989/1988 (10 months)
	(number)				(percentage change)		
WHOLESALE TRADE							
Person-days lost	3 477	38 508	32 165	31 219	1 007.5	-16.5	0.9
Workers involved	305	671	904	641	120.0	34.7	-3.0
Average duration	11.4	57.4	35.6	48.7			
RETAIL TRADE							
Person-days lost	120 604	205 160	89 868	123 819	70.1	-56.2	82.4
Workers involved	3 985	5 174	1 723	2 040	29.8	-66.7	35.6
Average duration	30.3	39.7	52.2	60.7			
TRADE SECTOR AS A WHOLE							
Person-days lost	124 081	243 668	122 033	155 038	96.4	-49.9	56.9
Workers involved	4 290	5 845	2 627	2 681	36.2	-55.1	23.8
Average duration	28.9	41.7	46.5	57.8			

SOURCES: Ministère du Travail, *Grèves et lock-out au Québec.*
Direction de l'analyse de la conjoncture industrielle, MICT.

LABOUR DISPUTES
TRADE SECTOR
QUÉBEC
1986-1989

	% of estimated working days				Person-days lost
	1986	1987	1988	1989 (9 months)	1989 (9 months)
Wholesale trade	0.0	0.1	0.1	0.1	30 098
Retail trade	0.1	0.2	0.1	0.1	111 832
Trade sector as a whole	0.1	0.2	0.1	0.1	141 930

SOURCES: Statistics Canada (Cat. 72-002).
Ministère du Travail du Québec, special compilations, SIC, 1970.
Direction de l'analyse de la conjoncture industrielle, MICT.

CAPITAL SPENDING
TRADE AND COMMERCIAL SERVICES
QUÉBEC
1986-1989

INDUSTRY	1986	1987	1988*	1989**	1987/1986	1988/1987	1989/1988
		(millions of dollars)				(percentage change)	
TRADE – TOTAL	**465.3**	**550.0**	**560.8**	**629.5**	**18.2**	**2.0**	**12.3**
Wholesale stores	178.0	223.7	226.9	265.9	25.7	1.4	17.2
Department stores	37.6	24.7	15.1	39.4	-34.3	-38.9	160.9
Service station chains	51.9	70.0	88.3	97.6	34.9	26.1	10.5
Motor vehicle dealers	36.2	41.8	37.5	39.6	15.5	-10.3	5.6
Combination food stores	16.1	28.9	24.8	17.2	79.5	-14.2	-30.6
Other chain stores	64.3	77.8	71.3	75.4	21.0	-8.4	5.8
Other independent stores	51.8	47.7	60.7	55.1	-7.9	27.3	-9.2
Capital items charged to operating expenses	29.4	35.4	36.2	39.3	20.4	2.3	8.6
COMMERCIAL SERVICES – TOTAL	**1 909.2**	**2 260.2**	**2 491.7**	**2 761.8**	**18.4**	**10.2**	**10.8**
Laundries and dry cleaners	6.6	3.3	2.2	3.2	-50.0	-33.3	45.5
Motion picture theatres	9.3	7.3	8.2	13.5	-21.5	12.3	64.6
Hotels	100.7	114.8	197.1	169.2	14.0	71.7	-14.2
Other commercial services	1 792.6	2 134.8	2 284.2	2 575.9	19.1	7.0	12.8
TOTAL – TRADE AND COMMERCIAL SERVICES	**2 374.5**	**2 810.2**	**3 052.5**	**3 391.3**	**18.3**	**8.6**	**11.1**

* Preliminary.
** Estimates revised at mid-year.
SOURCES: Statistics Canada.
Direction de l'analyse de la conjoncture industrielle, MICT.

BUSINESS BANKRUPTCIES IN THE TRADE SECTOR
QUÉBEC – ONTARIO – CANADA
1986-1989

	1986	1987	1988	1989 (10 months)	1987/1986	1988/1987	1989/1988 (10 months)
NUMBER					(percentage change)		
Québec	1 000	1 024	1 217	1 040	2.4	18.8	7.2
Ontario	550	526	502	446	-4.4	-4.6	6.7
Canada	2 418	2 319	2 473	2 180	-4.1	6.6	8.0
Qué./Can. %	41.4	44.2	49.2	47.7			
Ont./Can. %	22.7	22.7	20.3	20.5			
LIABILITIES ($'000)							
Québec	125 658	150 238	236 640	195 710	19.6	57.5	20.4
Ontario	88 455	94 740	78 530	87 757	7.1	-17.1	30.6
Canada	370 399	414 743	464 341	392 021	12.0	12.0	11.6
Qué./Can. %	33.9	36.2	51.0	49.9			
Ont./Can. %	23.9	22.8	16.9	22.4			

SOURCES: Consumer and Corporate Affairs Canada, Office of the Superintendent of Bankruptcy, *Insolvency Bulletin*.
Direction de l'analyse de la conjoncture industrielle, MICT.

ECONOMIC INDICATORS BY ADMINISTRATIVE REGION 1988-1989

REGION	EMPLOYMENT		UNEMPLOYED		CAPITAL SPENDING	
	1988	1989 (11 months)	1988	1989 (11 months)	1988	1989
	(thousands)		(thousands)		(millions of dollars)	
Bas-Saint-Laurent — Gaspésie-Îles-de-la-Madeleine	117.0	111.5	18.7	19.8	627.9	906.5
Saguenay — Lac-Saint-Jean	114.0	113.6	16.0	14.5	984.8	1 264.1
Québec — Chaudière-Appalaches	420.0	428.6	36.6	33.2	3 017.1	3 441.3
Mauricie — Bois-Francs	198.8	199.4	20.8	22.4	1 648.6	2 155.5
Estrie	117.6	121.0	10.2	11.9	1 147.1	949.6
Laurentides — Lanaudière	273.2	288.3	29.8	27.4	3 099.1	3 162.9
Montérégie	530.6	551.7	48.3	48.7	4 858.4	4 937.9
Montréal-Centre — Laval	987.8	980.7	106.1	109.2	9 164.1	9 810.3
Outaouais	132.5	129.5	11.4	11.4	1 127.5	1 225.4
Abitibi — Témiscamingue	62.0	63.3	6.3	7.5	874.4	1 106.2
Côte-Nord — Nord-du-Québec	47.0	47.5	6.5	6.1	1 235.2	1 528.9
ALL ADMINISTRATIVE REGIONS	3 000.6	3 035.1	310.7	311.9	27 784.1	30 488.5

SOURCES: Statistics Canada, *The Labour Force Survey.*
Bureau de la statistique du Québec, *Investissements privés et publics au Québec.*
Direction de l'analyse de la conjoncture industrielle, MICT.

COMPARISON OF ECONOMIC PERFORMANCE BY ADMINISTRATIVE REGION PERCENTAGE CHANGE 1988-1989

REGION	EMPLOYMENT		UNEMPLOYMENT RATE		CAPITAL SPENDING	
	1988/1987	1989/1988 (11 months)	1988	1989 (11 months)	1988/1987	1989/1988
Bas-Saint-Laurent — Gaspésie-Îles-de-la-Madeleine	3.0	-5.2	13.6	15.1	0.7	44.4
Saguenay — Lac-Saint-Jean	1.5	-0.4	12.6	11.3	20.0	28.4
Québec — Chaudière-Appalaches	2.6	1.9	8.2	7.2	1.0	14.1
Mauricie — Bois-Francs	4.2	0.1	9.2	10.1	11.2	30.8
Estrie	6.7	3.0	8.0	9.0	-3.0	-17.2
Laurentides — Lanaudière	3.6	5.5	10.0	8.7	27.5	2.1
Montérégie	1.0	3.9	8.6	8.1	12.8	1.6
Montréal-Centre — Laval	2.1	-0.6	9.7	10.0	6.1	7.1
Outaouais	7.3	-2.1	8.0	8.1	26.2	8.7
Abitibi — Témiscamingue	7.3	1.3	8.9	10.7	57.1	26.5
Côte-Nord — Nord-du-Québec	5.4	0.4	12.5	11.4	21.3	23.8
ALL ADMINISTRATIVE REGIONS	**2.8**	**1.1**	**9.4**	**9.3**	**11.4**	**9.7**

SOURCES: Statistics Canada, *The Labour Force Survey*.
Bureau de la statistique du Québec, *Investissements privés et publics au Québec*.
Direction de l'analyse de la conjoncture industrielle, MICT.